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TREATMENT OF ACUTE ENDOCARDITIS AND MYOCARDITIS

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Perhaps there is no province of medicine that has elicited such sustained interest as that devoted to circulatory diseases. Every year sees the appearance in text-books, systems of medicine and current journals of an increasing number of articles on the heart, some of them voluminous in character, some inclusive and some devoted to limited fields.

Comparative anatomy, physiology and the clinic have been peculiarly busied with the subject in the last few years, so that it would hardly be an exaggeration to say that even in the last lustrum almost a complete revolution has been wrought in our ideas of the physiology and pathology of the heart.

More especially has the investigation of these later years taught us that, though the heart in the totality of its structure and the totality of its function operates to forward the circulation, the totality of structure is the combination of distinct anatomic units and the totality of function is cooperation and coordination of the functions of these units, and that a keener analysis of the data of disease is distinguishing clinical complexes corresponding to disturbance of function or change in structure of one or more of these units.

To illustrate my statement in brief, it is now recognized that the heart-muscle substance subserves five distinct functions, some of which at least are attributes of definite muscle fibers. They are:

1. The power of producing a stimulus which can excite the heart to contract—stimulus production.

2. The power of being able to receive a stimulus—excitability.

3. The power of conveying a stimulus from fiber to fiber—conductivity.

4. The power to contract when stimulated — contractility.

5. The power to retain a certain amount of contraction, even when the active movement has ceased — tonicity.

Anatomically the heart is found to be composed of two very different kinds of muscle substance; one, representing a very small part, is the remains of the primitive cardiac tube of lowly types of animal life; the other represents the bulk of cardiac muscle with which we are familiar.

One part of these remains of the primitive tube is the "pace-maker" of the heart, subserving the function of rhythmicity and situated at the junction of the superior vena cava and the upper border of the right auricular appendix; another is the bundle of His, or auriculoventricular bundle, which subserves the function of conductivity, a disturbance of which gives rise to the condition known as heart-block, which obtains in the clinical complex termed Stokes-Adams syndrome.

Certain kinds of irregularities of heart-beat can be attributed to interference with other parts of this primitive tissue, while cardiac dilatation, with which we are all familiar, is attributable to impairment of the function of tonicity, resident in later-developed muscle, representing the bulk of the heart, whose other function, contractility, when involved gives rise to many of the phenomena of cardiosclerosis.

RELATION OF CARDIAC AFFECTIONS

In considering acute affections of the heart, we should not be confused by terms. We read and talk of acute endocarditis, acute myocarditis and acute pericarditis, often as if they had but little relationship to each other. That conception of cardiac disease is wrong. In truth, these affections are most intimately associated.

It is true that the endocardium may bear the brunt of the disturbance; it is true that the vegetations produced on the valves may be dislodged and become the cause of the involvement of distant organs, as the brain, with consequent hemiplegia, or the cause of death; and it is true that the defects in the valves will, as time goes on and sclerosis increases, lead to mechanical obstacles to the circulation of great significance, but at the time of the acute involvement, except for the dislodging of emboli, the endocarditis, *per se*, has but little influence on the immediate outcome.

What is of importance is this fact, which should never escape our minds: Endocarditis is only a part of a general process that involves the myocardium as well, and this involvement is the serious feature in the case.

Moreover, it is equally true that the pericardium may bear the brunt of the disturbance; and it is equally true that the effusion may, on rare occasions, be the immediate cause of death; and, equally true, adhesions may occur, to obliterate the pericardial cavity and later lead to cardiac failure through that fact; but at the time of the acute involvement, the pericarditis, *per se*, has but little influence on the outcome. Again, what is to be equally kept in mind is that it, too, is but a part of a more general process which involves the myocardium, and that this involvement is the serious feature in the case.

All three of these structures may be and very frequently are implicated, so that what we deal with in acute infectious processes, such as occurs in rheumatism and sepsis, is a carditis or pancarditis.

Of the three, the myocardium is by far the most important structure and it may be involved in many instances alone, and because our attention has been trained so assiduously to the appreciation of murmurs, endocardial, and rubs, pericardial, we overlook the signs which should be as equally obvious of myocardial disease.

The changes in the heart may be due to the invasion of the organ by the pathogenic germs or may be due to the effects of the toxins of such organisms elaborated at a distance. In the former case the heart may be primarily or secondarily affected.

In this article I shall consider only the rheumatic or toxic endo- and myocarditis, leaving the cases due to the direct action of other pyogenic organisms, constituting septic or malignant endocarditis, out of consideration.

In acute inflammatory rheumatism, the involvement of the heart is so common as to make it a probable complication in a given case. In diphtheria and pneumonia myocardial changes always threaten and should never be forgotten for a moment. The signs and symptoms of endocarditis and myocarditis do not burst into bloom in an instant; they are often extremely insidious in their onset; there is always that borderland of doubt that must be traversed before a diagnosis can be certainly established, and yet it is in this borderland, which we seek ever to narrow by more refined clinical methods, that the paths may divide for the patient; and so what should be emphasized is that in the diseases just mentioned, to be forewarned is to be forearmed and the least hint of cardiac implication should give the patient the benefit of the doubt, so far as measures directed toward protecting the heart are concerned.

SIGNS AND SYMPTOMS

What are the hints of cardiac implication?

When during the course of the rheumatism there occurs a rise of temperature that cannot be accounted for by joint-lesions or other local involvement, a developing endocarditis should be thought of. This has especial weight in children in whom the joint involvement may be slight or quite absent. There may be no other evidence and the meaning of this febrile exacerbation may not be clear until long after, when the slowly advancing sclerosis secondary to the process has developed a mechanical defect in the valve accompanied by its appropriate murmur and other signs.

A murmur may occur, however, and if this murmur comes on early and with no signs of myocardial weakening, it probably is due to a valvular endocarditis. A later development of a murmur and more especially with diminishing strength of heart-beat may be due simply to the relaxation of the auriculoventricular rings, producing relative insufficiency and attributable to the parenchymatous degeneration of a milder type, a cloudy swelling, while there may be no accompanying endocarditis and the heart may later return to its pristine integrity.

If a murmur take on a musical quality, it is more likely to be due to endocarditis and the diastolic murmur may be considered as practically pathognomonic of that condition.

When the myocardium is involved in profound changes either by an extension of the rheumatic process, in a parenchymatous degeneration, such as we see in diphtheria, typhoid fever and influenza, or in an interstitial inflammation, suppurative, from the invasion of pyogenic organisms, we get additional and more significant symptoms. They are:

1. An increase in the rate of the pulse out of proportion to the temperature (the pulse usually increases 8 to 10 beats to each 1 degree F.); a change in its character, becoming more empty, gaseous, of a lower tension; an irritability of the pulse, increasing on slight exertion or emotion and irregularity.

2. Changes in the physical signs, the apex-beat a little more diffuse, possibly a trifle displaced; the sounds somewhat muffled and if not so, sharper, shorter, more valvular; the cardiac outline a trifle enlarged, especially to the right.

3. Changes in the appearance of the patient, pallor or a slight cyanosis, increasing prostration, a little precordial discomfort.

Any of these signs, then, singly or in combination, increase of temperature, appearance of a murmur, increase in rate and change in quality of pulse, diffuse apex-beat, muffled sounds, enlarged cardiac outline, should lead one to take precautionary measures at once.

It should not be forgotten that the dreaded myocardial degeneration of diphtheria usually occurs in the second and third weeks after the attack, or at least that it becomes evident by alarming symptoms at that time, by vomiting, precordial distress, great anxiety and restlessness or apathy, and that sudden death is associated in our minds with it, as one of the tragic incidents of childhood.

The lesser signs detailed above might well have been detected by conscientious routine examinations and such an issue avoided. The heart is involved in diphtheria in from 10 to 20 per cent. of the cases.

Frequently in the acute process we have no further manifestations of the disease, but there may ensue dilatation, sometimes quite rapidly, with breathlessness, cough, perhaps edema of the lung tissue and, on occasion, pleural effusions. There may be nausea, vomiting, some mental disturbance, a swollen tender liver, scanty urine containing albumin and, though not characteristic of the acute attack, dropsy. Dilatation is more common and more striking in the rheumatic cases. In the myocardial degenerations progressive weakness of the heart or sudden failure on exertion is more likely to occur.

Our treatment begins, then, with constant vigilance to detect the first least sign of cardiac involvement and, on the mere hint of it, to institute in all its rigor the one measure that outweighs in importance all others directed to the relief of that organ.

THE VALUE OF REST

Rest means something more than going to bed. That, in all probability, the patient has already done, as endocarditis and myocarditis are usually secondary to processes that have already compelled rest in bed, but there are exceptions to this rule and especially in children, and it is no uncommon experience for the worker in children's clinics to have presented to him a child with acute endocarditis running a temperature too slight to attract the parents' attention and with no other symptoms except fugitive joint-pains and the malaise that brought him to the clinic.

To express crudely what rest in bed means, let us recall a few figures from physiology.

To estimate the amount of work the heart has to do many factors have to be taken into consideration, such as the quantity of blood put out, the aortic pressure to be overcome, the specific gravity of blood and its viscosity, the velocity of the current and the effect of gravity.

Some of these factors we cannot influence, but some we can.

Taking average figures, the amount done by the heart per hour is 1,000 kilogram-meters.

To raise 2,000 pounds one yard high, or 1 pound over a mile, in the course of an hour seems to be considerable work.

One of the factors we can influence is the output of the heart, because we can control the rate within certain limits.

Suppose that Mackenzie's figures are correct and that a change of position from lying down to sitting up with the legs down increases the pulse-rate from 2 to 5 beats per minute; that standing up means a further increase of from 4 to 8 beats a minute; slow walking an increase from a rate of 68 to 100, fast walking an increase to 140 and running an increase to 150 per minute; then one of the factors, the output, if each beat delivered the same, would be increased sitting up some 5 per cent., by standing 13 per cent., by slow walking nearly 50 per cent., by running, over 100 per cent.

One would scarcely think it judicious to require an inflamed heart or one degenerated after diphtheria, to a degree that may result in failure, to increase its work to the degree specified by these figures.

And this is not all, for another factor is the pressure, and we are told by numerous observers that the blood-pressure rises 5 to 10 mm. Hg in changing from the recumbent position to the sitting or standing.

If we take 120 mm. Hg as the average pressure in recumbency, then the rise just quoted means an increase of from 4 to 8 per cent. in the work done to overcome this factor.

Multiply these factors by twenty-four and appreciate what an economy in work rest in bed means over sitting up or being about.

But rest in bed means quiet in bed, for muscular exertion means more heart-beats and more pressure and again we have more work done. To prevent muscular exertion the patient must be made easy in bed, put in the position in which he feels most comfortable and that is often semirecumbent. Pillows must be arranged so as to give support and the bed must be smooth and regular. Effort to maintain a strained and uncomfortable position calls muscles into play, and their exercise means more work for the heart.

Mental work and worry, excitement and anger are to be avoided, because all these things by increase of heart-rate and blood-pressure are a burden to the heart.

These influences can be estimated mathematically and are very real things.

Every effort must be made to avoid restlessness and turning and nothing conduces to this more than sleepless nights.

THE IMPORTANCE OF SLEEP

How important sleep is for the maintenance of health is well known; how much more important for the recovery of health may be imagined. We are all too prone to skip over this item too lightly. We should find out each day how long our patient slept, whether the sleep was fitful or continuous and whether it was refreshing.

It often happens that the loss of sleep is due to incompetent nursing, to overheated rooms, to an uncomfortable bed, to too many visitors or to the introduction of subjects that annoy or worry. In other cases the patient is of a frankly nervous type, keenly concerned over his condition and moderate doses of bromids (15 to 30 grains) in the early evening will produce enough sedation of the nervous system to invite sleep.

If this condition does not obtain or the bromids do not succeed, recourse must be had to the hypnotics.

For milder grades of insomnia, insomnia accompanied by no considerable degree of distress, there are a long list of hypnotics in use, all closely allied, chemically and pharmacologically, such as sulphonal, trional, chloral-amid, paraldehyd, urethane, amylene hydrate, veronal; and this does not exhaust the list.

Every man who has handled these drugs comes after a time to have a preference. My preference is for trional or chloralamid.

These hypnotics all belong to the marsh-gas series, the series in which the carbon and hydrogen are linked in an open chain. All the members of this series have a depressant effect on the cerebrum, inducing sleep and later coma. The more links there are in the chain, the more toxic they become.

Methane, CH_4, ethane, CH_3-CH_3, propane, CH_3-CH_2-CH_3, and so on up the list are progressively more active.

The alcohols, CH_3OH, methyl or wood alcohol, CH_3-CH_2OH, ethyl or common alcohol and so on, possess the same properties. The oxids, as CH_3-CH_2-O-CH_2CH_3, or common ether, the aldehyds, as CH_3-COH, or methyl aldehyd, the basis of chloral, the ketones, as C_6H_5-CO-CH_3, or hypnone exert effects in kind. But the acids have no effect at all.

The introduction of certain other substances into the radicles may heighten the depressant effect on the cerebrum, as for example, the halogens.

The best-known example is chloral, which is the methyl aldehyd, given above, CH_3-COH, into which 3 Cl have been introduced to replace 3 H, hence, CCl_3-COH, or chloral. But while chloral is a highly potent hypnotic, the best of the series, it has acquired other properties which are not desirable. It is a depressant to the heart and the respiration. It is administered as chloral hydrate.

The chemist next tried to modify chloral so that he might retain its hypnotic effect while diminishing its toxicity. He did this by combining chloral with an NH_2 or amido group. In this way chloralamid was synthetized by combining chloral with formamid, CCl_3-CH (OH) NH.COH.

This body is slowly split in the organism, releasing the chloral sufficiently fast to produce the characteristic hypnotic effect, but not the cardiac and respiratory depression. It was thought that the amido body converted to ammonia would by a stimulating effect counteract the depression of the chloral, and that seems to be borne out by blood-pressure experiments.

Trional is a diethyl-sulphon-ethyl-methyl methane (CH_3) (C_2H_5)-C-$(SO_2C_2H_5)_2$. It will be noted that there are three ethyl groups in the structure. It is on them solely that the hypnotic effect depends. Sulphonal is the same with one less ethyl group. I believe these drugs to be the safest of the group.

Trional operates more rapidly than sulphonal, is eliminated more promptly, so has less effect during the following day, and is said to be less toxic. It is practically insoluble in water. It is best given in powder form. It has but little taste, can be put on the tongue dry and washed down. It can be given in wafers or capsules or dissolved in a little whisky, brandy or wine or stirred up in a little water or milk, but I must

emphasize my dislike of ever associating the administration of a drug with food.

The dose is 10 or 15 grains, given about two hours before sleeping-time and if this dose promises to be ineffectual another dose of the same size may be administered at the end of the second or third hour after the first dose.

Chloralamid, which is fairly soluble in water and freely in alcohol, may be given in solution or may be given in powder form. It should not be administered in hot menstrua, as the heat decomposes it. The dose is 20 to 30 grains and may be repeated after two or three hours as described for trional. For children the dose should be smaller, about one-half as a rule.

But even these may not answer. There remain two more powerful hypnotics to which we may have recourse, chloral and morphin. The former is very reliable, but its depressant effect has to be taken into consideration. I should care to use it only in the excited sthenic heart of rheumatic endocarditis; but if the myocardium was much involved or in the myocarditis of diphtheria, pneumonia, influenza or typhoid, I would distrust it.

Morphin is far and away the best hypnotic in cardiac disease—best because it is safest, surest and operative in the presence of distress, dyspnea or pain. It should be given in doses of ⅛ to ¼ grain hypodermically.

Circulatory disturbance as well as respiratory disturbance connotes actual or threatened deficiency of oxidation, so the importance of fresh air cannot be overestimated. That means that the choice of a room is important. The room should be capable of good ventilation and if it has a balcony or veranda that can be approached from it, the patient should have the benefit of fresh air. A room whose air contains an excess of carbon dioxid or a deficiency of oxygen will, of course, give rise to manifest disturbance of respiration, but those are not all the factors that cause discomfort. A room may have been freshly aired, but because of odors clinging to it, or because there is too much moisture or too much warmth, it may affect the patient unpleasantly.

DIET IN CARDIAC DISEASE

If the endocarditis intervenes in the course of an attack of rheumatic fever, there is no indication for changing the diet. It consists of milk, or milk to which milk-sugar enough to make the sugar content of the milk up to 10 per cent. has been added, which fortified milk contains 925 calories to the quart, milk soups, cereals, rice, bread and butter and eggs. Our patient needs some 2,500 to 3,000 calories a day in his food, more if his appetite dictates it, less if his digestion cannot handle it.

Myocarditis occurring in typhoid, diphtheria and other conditions named indicates no less food, rather more, for there is evidence that the nitrogenous destruction going on elsewhere in the body does not spare the heart.

With respect to the dietary, one thing in particular is to be emphasized, namely, that if tympanites or flatulency occur, the articles of food responsible shall be promptly eliminated and relief for the condition sought at once, as this distention embarrasses the heart's action.

Milk may have to be stopped at once, or modified, given as buttermilk, or whey, or peptonized. It should be remembered that the constituent of milk most likely to make trouble in fever is the fat. Skimming the milk may be all that is necessary to remedy the trouble. Milk is sometimes better borne diluted with water or vichy.

Cereals should be suspected as a possible source of gaseous collection, through the process of fermentation, or the disturbance may be attributed to the milk sugar.

METHOD OF OBTAINING CATHARSIS

In the prevention of distention the care of the bowels is as important as the regulation of diet. When first seen, a free evacuation of the bowels may be secured by calomel in divided doses, 1 to 1½ grains, in all, followed by a half ounce of Rochelle or Epsom salts or their equivalent. If the bowels do not continue free, a mild saline, like Hunyadi water or one of the many aperients on the market, or a half ounce of phosphate of soda may be given every second day or an enema may be given instead.

MEDICINAL TREATMENT

There are three objects to be aimed at in the use of drugs in acute cardiac disease.

1. To control or modify the progress of the disease of which the endocarditis is a part or complication.

2. To affect the progress of the cardiac condition itself.

3. To meet the needs of the heart as they arise, i. e., symptomatic treatment.

1. In the acute endocarditis of rheumatic fever, the salicylates should be continued in full dosage, 15 and 20 grains every two hours during the waking period; that is, there is no modification of the use of the drug when the endocarditis intervenes. It is impossible for one who has the opportunity to see many cases of rheumatism not to be impressed with the striking effects of the salicylates in rheumatism; and though it is agreed that the progress of the cardiac disease is not modified like the events in the joints, still it does seem irrational to neglect the only measure that can demonstrate its efficiency in other phases of the disease, if the drug does not depress the heart, which I think is a very rare occurrence even in such doses as I advocate.

I must acknowledge, however, that there is a wide divergence of opinion in this matter. While some men would push the salicylate to much larger doses, others contend that it is not safe or efficacious.

The one other mode of treatment directed against rheumatism, which has much vogue, is the alkaline, and it is contended by its advocates that it has a decided effect on the cardiac inflammation.

I do believe that the use of the alkali makes the salicylates better borne and I am accustomed to combine the treatments.

A rough rule is to give double the dose of salicylate in alkali, e. g., if giving 15 grains of the salicylate, to give 30 grains of the alkali, until the urine reacts alkaline and then diminish the dose, but keep the urine alkaline.

In parenchymatous myocarditis occurring in diphtheria, the onset is usually late, but if it does occur while the process is active in the throat, the antitoxin should be pushed vigorously, for though the toxin combined with the heart muscle cannot be ousted, the combination of more can be prevented.

In typhoid its appearance does not contra-indicate the use of the cold bath, as long as the reaction remains good, and in pneumonia the cold air is of double value when myocarditis ensues.

2. I do not think we have any drug that can affect the progress of the cardiac condition itself. One cannot be entirely indifferent, however, to the constant reference of the books to the use of potassium iodid in such con-

V. 5
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ditions. I find, however, that the references are almost invariably in very general terms, with no definite instructions as to how it is to be used or what the rationale of its usage is.

Potassium iodid belongs to the class of drugs known as alteratives, and that term covers about all we know of their action; that is, that they produce changes. There are no more real therapeutic agents than this class of drugs, as witness mercury and potassium iodid in syphilis. The fact that new tissue of syphilitic origin fairly melts away under the action of potassium iodid has led to its use in all kinds of conditions in which replacement of tissue new or old is formed, but with dubious results. That this drug may not yet prove an active agent in controlling inflammatory and degenerative changes in other conditions than syphilis, one cannot predict.

SYMPTOMATIC TREATMENT

3. Before considering drugs, what local measures of relief may be afforded?

Local measures have been used (1) to modify the progress of the inflammation, and (2) to relieve such symptoms as palpitation, precordial distress and pain. These measures consist in the application of cold, heat or counterirritants.

The application preferred is the ice-bag over the precordium. This is indicated in cases of pain or distress and certainly gives relief.

Palpitation is also relieved and it is maintained that the slower pulse, better heart-beat and improved regularity that is claimed for this method can be demonstrated experimentally in the healthy subject. The ice-bag may be put on at intervals of several hours for an hour at a time or can be kept on continuously.

Care must be taken that the bag does not become a source of annoyance from its displacement and the effort demanded to keep it in place, as the fatigue ensuing would more than neutralize any benefit that might accrue from it. There is constant danger that these things may degenerate into senseless routine, and it is one of the commonest experiences to find that neither nurse nor patient makes any effort to keep the bag where it belongs.

I believe that the effects produced come through the reflexes, starting in the skin and impinging on the viscus innervated from the same segment in the cord as the skin area concerned, so that an ice-bag resting on the abdomen can scarcely have the effect on the heart to be anticipated from one resting on the precordium.

To some patients who stand cold badly, the application of heat over the heart in the shape of fomentations or poultices may allay pain and distress. It is not a usual procedure.

It has been the practice from time to time to use counterirritants over the heart in acute endocarditis, not merely to allay pain, but with the idea that it influenced the inflammatory processes. Blisters were commonly used. The practice is but rarely recommended in this country.

When pain cannot be relieved by local measures, or when precordial distress, anxiety or palpitation is severe, morphin is indicated in doses of 1/8 to 1/4 grain hypodermically.

In the first attacks of rheumatic endocarditis the above measures will suffice in the vast majority of cases to carry the patient through. The heart muscle is strong; mechanical defects have not yet had time to strain it and our chief concern will be so to manage the convalescence as to study the cardiac reserve and spare the heart excessive demands that hasten it to permanently crippled condition.

Sometimes, however, in the first attack and much more frequently in recurring attacks, cardiac insufficiency intervenes, with rapid dilatation, dyspnea, cardiac distress and occasionally, but rarely in first attacks, a dropsy.

When this condition comes on rapidly, it is accompanied by much mental as well as physical distress and there is nothing that accomplishes so much at once as morphin. It should be given in doses of 1/8 to 1/4 grain hypodermically. It quiets the mind, lessens the dyspnea and produces muscular relaxation and accomplishes the maximum of rest. Sleep ensues, itself of the greatest value.

In such a condition the heart needs stimulation.

There is no drug comparable to digitalis unless it is strophanthus. I prefer, if the stomach has been in good shape and the condition does not threaten too urgently, the infusion of digitalis in doses of 2 to 4 drams three or four times a day, until results are obtained.

When nine to twelve doses have been given it is wise to intermit, for such quantities will be operative if any quantity will and more may prove toxic. The omission of the drug for two to four days allows of excretion of some of the accumulation. Other official preparations may be used if fresh and reliable. For more urgent use strophanthin stands preeminent.

There is no drug that operates more rapidly than a reliable strophanthin gr. 1/120 put into the vein or into the muscle. Its effect on the pulse in increasing its amplitude may be made out in a few minutes and on the urine in two or three hours. The dose may be repeated once in the next twelve hours if needed, but further dosage is hazardous. It is better to rely on the effects of the digitalis, which should be begun at the same time as the strophanthin and the delayed action of which will take up the strophanthin effect in twenty-four to forty-eight hours.

Little reliance is to be placed on the glucosids of digitalis for prompt action or for full equivalent of the action of the leaf or its official preparations.

As the heart strength is restored the drugs should be withdrawn as rapidly as possible.

In the cases of acute myocardial degeneration we may have progressive weakening, slapping sounds, thready and rapid pulse and some evidence of dilatation, especially to the right. This weakening, if not responding to rest and the measures advised, will need the administration of digitalis.

Besides this condition, we have sudden cardiac collapse, asystole. This occurs especially often in diphtheria. So rapid may this be that death ensues before measures of relief can be obtained.

Myocardial degeneration may be marked in diphtheria, but we have reason to believe that the collapse is more often due to vasomotor paralysis than to cardiac. Such vasomotor collapse is probably the cause of most of the deaths in the myocardial cases, and it is safer to treat such cases of collapse on that theory.

In vasomotor collapse or in surgical shock, the splanchnic vessels are dilated and the patient is literally bleeding to death into his own visceral vessels. The vasomotor center might or might not respond to stimulants, but the vessels will. A rapid and marked effect, though a temporary one, is obtained by a hypodermic of adrenalin, 15 to 20 minims of 1 to 1,000 in normal salt

solution, the strength in which it is usually dispensed. This should be given deep into a muscle whose wide network of vessels, Meltzer has shown, aborbs almost as rapidly as a vein.

Next, the abdomen should be massaged and pressure brought to bear on it, for the mechanical effect is to squeeze the blood from the vessels along into the veins and toward the heart.

Another effectual way of stimulating the splanchnic vessels is to give an enteroclysis of hot saline solution and hot black coffee. It should be hot, not lukewarm, should be at 110 to 115 F. The heat causes contraction of the splanchnic vessels and raises the column of blood in the vessels of the general circulation and forwards their contents into the veins, while the coffee acts on the heart and vasomotor center if it is capable of responding.

Another drug directed toward the vasomotor center is camphor 5 grains in 10 per cent. solution in olive oil, or caffein 3 to 5 grains hypodermically as a soluble double salt of caffein and sodium salicylate or benzoate.

Strychnin may be tried in doses of 1/20 grain hypodermically.

For the heart, more important than caffein or camphor is the intravenous use of strophanthin.

Digitalis in other preparations acting more slowly may be added to sustain the circulation.

Hypodermoclysis or a saline infusion may be of value in these emergencies.

One of the most difficult items in the treatment of endocarditis and myocarditis is the management of convalescence.

No patient should be allowed to get up until every symptom of cardiac insufficiency has disappeared and he is free from fever. Moreover, he should not be allowed up until some study has been made of his cardiac reserve.

I cannot improve on Forchheimer's precautions, which I quote literally:

> **I usually begin with a massage and resistance movements, applied in the mildest possible way at first and then gradually increased; the condition of the pulse as to regularity, rate and tension being noted before and after manipulation. When the proper reaction takes place the passive exercises are increased in force and duration. . . . During the first week the patient has been allowed to sit up in bed, first for a short time, then longer and longer, until only the normal change in pulse-rate is noted. After a week of treatment, sometimes sooner, sometimes later, the patient is allowed to leave his bed and sit up in a chair by the side of the bed. The normal reaction of the pulse may be determined here by its frequency; if an increase of about 20 beats per minute is produced, it must be looked on as an abnormal reaction.**
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> **After he has sat up in a chair, the time of sitting up being gradually increased, he is allowed to walk; first short distances, then longer and longer, being finally permitted to leave the room. Then he may be permitted to walk down stairs, to go out for a drive and finally to walk up stairs.**

These rules are excellent and it is step by step that the patient has to be followed and observed. As the heart regains strength, it needs exercise, but always under observation until it demonstrates its improvement under the new test.

Change of air and surroundings may help to hasten convalescence.

Fresh air, an abundance of good food and good cheer leave little for medicines. Tonics are usually superfluous under such circumstances and the red cells take care of themselves, but if the ideal cannot be attained, iron in the shape of Blaud's pills, 5 grains three times a day, with or without a little arsenic in the shape of arsenous acid 1/40 grain three times a day, which can be combined with the iron, or as Fowler's solution 3 to 6 minims three times a day.

Strychnin 1/60 to 1/30 grain, and small doses of quinin, 1 grain three times a day, are credited with strengthening effects.

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RELATIONSHIP OF DRUG ADDICTIONS, PARTICULARLY ALCOHOLISM, TO NERVOUS AND MENTAL DISEASES

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Drug addiction is frequently associated with lesions of the cerebrospinal system as cause or effect. It is comparatively simple to recognize many of the pathologic conditions resulting from drug addiction; but it is difficult to clear up the obscure etiology usually lying back of the addiction itself. Outside of cases manifestly artificially induced, it is rare to find an instance of drug habit which is not engrafted on underlying neuropathologic soil. Among artificially induced cases may be cited those of persons who have blundered into the habit through taking alcohol as a tonic, or as a hypnotic, or as a sedative in dysmenorrhea, or through the use of morphin to relieve pain such as that incident on gall-stone colic or neuralgia. In this class also are those cases induced through social customs and prejudices, such as the custom of treating; that of giving young children alcoholic beverages in the belief that such will make them healthy, large and strong, and the wide-spread custom among the working classes of taking alcohol in the belief that it gives muscular endurance or supplies bodily warmth. But in those cases not artificially induced it is difficult to trace the etiology because of the part such factors as heredity or environment may or may not play in the neuropathologic condition. Alcoholism, or other drug addiction, in the ancestry does not necessarily produce a similar condition in the children, but it is probable that this, as is the case in tuberculosis, syphilis, cancer, etc., implants in the offspring a less resisting constitution which proves to be a ready soil for certain neuroses with which drug addiction seems especially likely to become associated. We cannot always say that a neurotic constitution is the result of heredity even when the ancestry has been such as to point to that conclusion; for often the children of alcoholics and other drug addicts are so insufficiently nourished during childhood, and are reared in such unhappy and such unhygienic homes as to endow them with unstable nervous constitutions, even though the parents may not have been the subjects of such addictions. A factor which I believe may figure largely in evolving the unstable, the unfit, among whom drug habits abound, is the wide-spread use, during infancy, of opium-containing and other narcotic-compounded soothing-syrups.

ALCOHOLISM AS A CAUSE

1. As a cause alcoholism, the conspicuous example of drug addiction, may be associated with forms of neuritis affecting many or all of the *peripheral* nerves (alcoholic

multiple neuritis). But there are infinite gradations of this neuritis from slight paresthesias up through the severe forms in which wrist- and ankle-drop may figure, to that in which cranial nerve or cerebral involvement may be found. I digress here to say that we often do not sufficiently emphasize the various paresthesias with which we are familiar; when no more serious symptoms arise we are likely to look on them as of little consequence; yet, when a neuritis develops we do not hesitate to point to them as having represented its prodromal stage. By looking on these paresthesias, then, as at least indicative of an especially vulnerable nervous system, it may be possible to avoid more serious subsequent involvement. At times, as in certain eczemas, acnes, and some skin infections (often induced by scratching), it is difficult to determine whether the irritation is due solely to inflammation of the nerve terminals: there may be inflammation of the skin emunctories through its effort to eliminate toxins from the system. As an illustration of the action of a toxin on nerve terminals and skin, I recall a recent case of fatal acute exfoliating dermatitis apparently induced in a neurotic individual by a dose of wood alcohol. We are accustomed to think only of surface perversions of sensation such as numbness, prickling, formication, etc., as constituting the paresthesias; but a condition often exists in the internal organs which it is safe to classify as equally indicative of paresthetic states. An example in the alcoholic is that peculiar unsatisfied sensation in pharynx, gullet and stomach which early expresses itself in a desire for some hot, burning substance. A further development of this paresthetic state reveals itself in the cough noticeably characteristic of the alcoholic, having its origin commonly in an irritation of the nerve terminals of the pharynx or stomach. The hissing, buzzing, crackling noises so distressing to the chronic alcoholic may at times be expressive of paresthesias which often are an important factor in the formation of hallucinatory experiences (persecuting voices) which in turn may give rise to morbid mental states.

2. Alcoholism may be causally associated with lesions of the *cranial* nerves, with or without general neuritis, instances of which effect may be seen in optic atrophy—especially produced by methyl alcohol—trigeminal neuralgia, rarely peripheral facial palsy; disorders of taste and smell, and tremulous tongue, all pointing to cranial nerve involvement. Some authors believe that sudden death in alcoholics is at times produced by inflammation of the vagus.

3. Alcoholism may be associated as a cause with *cortical* involvement, with or without demonstrable peripheral change. This condition may be observed in the several forms of delirium tremens, in alcoholic amnesias and automatisms, in alcoholic epilepsy, hallucinosis, dementia, and also in alcoholic "wet brain."

4. Alcoholism may be causally associated with both *peripheral* and *central* nerve involvement seen in Korsakoff's psychosis and alcoholic pseudoparalysis. In the former we usually find neuritis in the extremities along with impairment of the mental faculties, manifested typically in loss of memory for recent events, confabulation, and disorientation. In pseudoparesis, produced only by alcohol, there is peripheral and central involvement of such nature as to produce a facsimile of the picture seen in true or general paresis.

5. Alcoholism may causally display its effects chiefly on the *cord*, giving rise to pseudo-tabes, at times resembling very closely tabes of specific origin.

6. Alcoholism is associated as a cause with involvement of the *higher cerebral centers*. This is true in all drug addicts. Such involvement exists side by side with the lesions already mentioned as well as when they are not present.

"Even the smallest quantities of alcohol tend to lessen the activity of the brain, the drug appearing to act most strongly, and therefore in the smallest quantities, on the most recently acquired faculties, to annihilate those qualities which have been built up through education and experience, the power of self control and the sense of responsibility."[1]

In 1900, Kraepelin and Dr. Kürz found by experiment that moderate daily drinking reduced the rapidity with which both habitual and free association of ideas were formed in the mind. In the case of the latter the retardation was the more marked. The same experimenters found the memory to be greatly retarded. A. Smith obtained like results in twenty-seven experiments.

"Even in small doses alcohol exercises a paralytic action on the higher psychic processes. Inhibition in its more complex and elevated manifestations—judgment, modesty, reserve, shame and prudence—becomes weakened or suspended. Action follows thought with greater promptness and less deliberation. The tipsy man, instead of carrying out in an orderly manner a program suited to his true character, becomes the passive and pliable sport of every chance impression that happens to affect his consciousness."[2]

An example of perverted judgment seen every day in the alcoholic wards is the peculiar suspicion with which the alcoholic regards everyone who approaches him. He doubts the disinterestedness of his physician, attributing anything the latter may wish to do for him to selfish motives or to some plot on the part of the victim's family. It is characteristic of the alcoholic impairment of judgment that the patient shows indifference to his own diseased condition and doubts the significance of glaring pathologic symptoms. A nephritic, when told of the condition of his urine, will say: "That's nothing; you find that in everybody." He will refuse to regard seriously tabetic pains, or he will treat lightly, refusing to take medicine, a condition in which the legs are enormously edematous. I have had chronic alcoholics of a high order of intellect suddenly confronted by the necessity of abstinence on account of intercurrent disease, such as tuberculosis; and these habitués, after their condition was cleared up, have been amazed at their former blindness in thinking they could do their best when under the influence of alcohol.

In the beginning of this paper I stated that it was comparatively simple to recognize much of the pathology resulting from drug addiction, especially with alcoholism as the cause. We have cited instances of such pathology expressed in the brain and nervous system. There were also mentioned factors, social customs, heredity, etc., which, in my opinion, lead to drug addiction as an effect.

ALCOHOLISM AS AN EFFECT

In dealing with the pathologic conditions associated with addiction to drugs as a cause (1, 2, 3, 4, etc.), we were able to grade results from the least marked nerve involvement to the most serious, in which the brain and its highest processes participate in the diseased conditions. It was pictured so merely for purposes of clear-

1. Cushny: Pharmacology and Therapeutics, Philadelphia, 1910, Lea & Febiger, Ed. 5, p. 133.
2. Tanzi: Text-Book of Mental Diseases, Rebman Co., New York, 1906, p. 314.

ness, as all grades and combinations of the above syndromes may exist, if not simultaneously at least successively. In the following, in which the conditions are reversed, that is, in which the addiction itself is an effect of some usually obscure cause, the gradation cannot be so definitely represented.

As an effect the addiction to alcohol, morphin or other narcotic drug may be associated with various neuroses and psychoses (neuralgias, tics, obsessions, etc.). The fact that a neuralgic pain long continued may lead to the formation of a drug habit, especially morphinism, is well known; a tic often ceases temporarily while the sufferer is under the influence of a narcotic; and fears and abulias may disappear under the same influence. One of my patients, a successful business man, has had to retire from business owing to an obsession which, through fear of his ability to put through a business deal, compelled him to resort to morphin before every important transaction, in order to overcome his timidity.

Addiction to drugs, noticeably alcoholism, is frequently associated as an effect with that peculiar, though common, constitutional make-up known as cyclothymia. This is an emotional disorder and expresses itself in periods of depression — dysthymia, alternating with periods of excitation — hyperthymia. Between these phases such individuals often experience normal periods. The habitué of this class is very often met with. Such persons have resorted to their drug as a solace during the depression; as an outlet during the period of exuberance. Jelliffe says:[3]

"The cyclothymic constitution . . . manifests itself very frequently under the guise of periodic alcoholic debauches. . . . The alcohol excesses are apt to be fairly short in duration and are frequently interspersed with periods of productive energy, often in the gifted, of a very high order of efficiency. . . . It is recognized by many at the present time that dipsomania—or periodic drunkenness—is not by any means always an epileptic equivalent. . . . On the other hand, periodic drunkenness is a common cyclothymic manifestation, as well as a frequent complication in a fully developed manic-depressive psychosis. I have observed it in both the cyclothymic depressed and the cyclothymic excited persons, though rarely in the same individual."

The application of the term "periodic drunkenness" must be limited when applied to the foregoing class. If by "periodic drunkenness" we mean the condition in those individuals who are abstinent between sprees, the debauch may be attributed to the cyclothymic constitution; but if the periodic drunkenness applies to those chronic alcoholics who drink daily, coming up periodically to a spree, the debauch is to be attributed to the cumulative toxic effect of alcohol on the system. It is well also not to confuse or use synonymously the terms "periodic drunkenness" and "dipsomania." Dipsomania is a very rare condition, and a more desperate one than periodic drunkenness. It entirely transcends the will of its victim, thus lying in the realm of true insanity. Tanzi says that it manifests itself periodically in a morbid craving which is an uncontrollable impulse.

We find alcoholism a result of involutionary processes. It "is generally the effort of the individual to maintain his productive power by recourse to artificial stimulation" (Neff). It is noticeable that a previous moderate indulgence in alcohol sometimes at this period becomes excessive. Curiously, however, we find persons in whom the indulgence has previously been excessive who at the involutionary period entirely cease to have a desire for alcohol.

Drug addiction may be associated as an effect with manic-depressive insanity, having been begun in the depressive stage as an effort to counteract the melancholy, or bodily depression. On the other hand, the maniacal or excited phase may be the starting-point in the habit formation as an effort to procure quiet or sleep.

Drug addiction, particularly alcoholism, is relatively frequently associated, as an effect, with the early stages of dementia præcox—especially so in young men in a city environment. This does not result from a craving for narcotics. The individual is attracted toward the gaiety of brilliantly-lighted cafés, saloons and the red-light district, and his habit formation is an incident accompanying his indulgence of whimsical fancies beyond his control.

Drug addiction is often an effect associated with hypomania, in itself characterized by "an exuberance of thought, speech and action which resembles that of the first degree of drunkenness" (Tanzi). This disease is likely to lead its victim, at times through his insistent sociability, at times through the depression following the characteristic "stress of occupation," to alcoholism or morphinism.

Alcoholism especially may be a result of a predisposition caused by the deteriorating processes of general paresis. More frequently, however, we find the alcoholism already existing and more freely indulged in as the specific disease advances, thus adding an agent highly favorable to the action of the poison of syphilis in the production of paresis. The finely organized cortical cells and nerve tissue cannot successfully withstand the double toxicity. In discussing the frequent association of alcohol, syphilis and general paresis, Dr. August Hoch[4] lays great emphasis on the fact that alcohol is an important cause in the production of brain diseases in which there is syphilis.

In the study of drug addictions one soon comes to see that there are many conditions in which the addiction may figure both as cause and as effect. Alcoholism in the ascendants may establish disease of brain or nervous system and this in turn be the determining factor in the etiology of alcoholism or other drug addiction in the descendants. In the individual a drug habit once formed establishes organic and mental changes leading to tolerance and finally craving, making a continuance of the indulgence necessary to preserve his comfort against the ever-increasing distress of withdrawal.

It is well known that narcotic drugs may obscure the clinical picture and symptom-complex of diseases generally. The obscuring of the signs and symptoms of appendicitis by morphin is a familiar example. This obscuring is likewise true in nervous and mental diseases. Cases are not uncommon in which the symptoms of the early exuberant grandiose stage of general paresis have been overlooked because of the superficial likeness of such symptoms to those of alcoholism. This is true as well at times when depression characterizes early paresis. I recall the case of an alcoholic in whom very definite pains of tabes asserted themselves on the withdrawal of his drug; and the case of a morphinist whose neuritis did not reveal the symptom of pain until her morphin was stopped, although definite signs of a severe neuritis had been in evidence for several weeks, though entirely overlooked.

3. Am. Jour. Insan., April, 1911.

4. State Hosp. Bull., New York, September, 1909, p. 7.

In this paper I have considered many of the more common nerve and brain conditions in which drug addiction plays a part as cause or as effect. The isolated cases, however, in which we find drug addiction associated are very numerous. This is conspicuously so in those cases in whom some perverted metabolism or toxic secretion is the exciting cause. Recently the case of a patient brought to the hospital for treatment for alcoholism had been diagnosed as neurasthenia; the woman had long been intolerantly looked on as a perverse habitué, her complaints set down as purely psychic. Though the psychic disease was a prominent feature, it was clearly due to perverted thyroid functioning; and alcohol had been resorted to because of the relief it afforded from the distressing mental and nervous symptoms characteristic of hyperthyroidism.

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THE NON-SURGICAL TREATMENT OF CHRONICALLY DISCHARGING EARS

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What to do for his patients with chronic discharging ears has been long a troublesome question to the general practitioner. He has always among his clientele a number of these cases, which have persisted for years, some of them despite the most earnest efforts to bring about a cure.

To have an ear attended with a constant secretion of purulent matter presenting at the external auditory meatus, especially if it be foul-smelling, is a disgusting affliction, from which the unhappy subject naturally yearns to be relieved. But the esthetic discomfort, though great, is the least of the disadvantages of such a condition.

A continually suppurating ear means the persistence of a destructive process going on in a physiologically important portion of the auditory organ. The middle ear cavity is essentially concerned in sound transmission, and it is impossible for it to be long the seat of a suppurative process without serious impairment of the hearing function.

In the course of time, if the process is not checked, the drum-membrane will gradually slough away and become almost or completely destroyed. The little ossicles, denuded of their thin layer of membrane, fall a ready prey to necrosis and are exfoliated, and sooner or later other important structures are involved in the destructive process. The hearing must surely, though slowly, grow worse if the disease is unchecked, and eventually may become lost. In addition to this actually present evil, there is in every case of suppurative otitis, a large chance of something more serious happening, because of an extension of the infection to neighboring vital organs.

It is unnecessary, I am sure, to have to insist on the seriousness of suppurative otitis to intelligent practitioners of the present day, although it is only recently that they came to realize the full measure of the dangerous possibilities of such an affection. The fact that life-insurance companies, basing their proposition on cold statistics, exclude from risks subjects of chronic discharging ears, is significant enough.

The patients generally look sickly and have muddy complexions, no doubt due to the absorption of bacterial toxins from the pus pent up in the pneumatic cavities. They are subject to frequent headaches from exacerbations of the disease, often with some involvement of the mastoid cells. But worst of all, they are in imminent danger of grave, it may be fatal, intracranial complications, due directly to an extension of the process. Most brain abscesses are known to come from this cause. Lateral sinus thrombosis is an even more frequently fatal result, and meningitis, septicemia, labyrinthitis, epidural abscess and facial paralysis are all possibilities seriously to be feared.

It is because of these dangers and disadvantages attending a suppurative otitis that many otologists who, from their experiences with the fatal consequences possible, are naturally more impressed than others with the gravity of the situation, have advocated radical surgery in such cases. Unfortunately the only operation which we can offer with a promise of almost certain success is one that is extremely radical. The milder or conservative measures, such as ossiculectomy, which are sometimes practiced, have been generally disappointing. To effect a certain cure it has been found necessary not only to remove the drum membrane and all the contents of the tympanic cavity, including the ossicles, but also to enter the antrum and the attic and throw all these into one by breaking down the partitions which lie between, concluding with the performance of a proper plastic operation on the auricle to form a new meatus leading to the cavity which has been thus artificially created.

An operation of this kind is one that the thoughtful and conscientious surgeon hesitates to advocate except for the most positive indications. At any rate, even when the operation seems for the best of reasons to be positively indicated, the wisest plan is not to intervene until conservative measures have been exhausted, and the patient has been given the benefit of a course of medical treatment.

It is quite evident that in many cases surgical treatment is out of the question, because of the personal attitude of the patient, and we must content ourselves with doing the best that can be done in other ways. On the other hand, there are cases, of course, in which it is plain to see from the beginning that no kind or amount of medical treatment alone can be successful, cases, for instance, dependent on chronic mastoiditis, the existence of large cholesteatomatous masses in the antrum and attic, or large polyps and granulations blocking the way of drainage. But there still remains a large percentage of cases which may be guided to a successful termination if we use the right kind of treatment and use it properly.

The object of treatment of suppurative otitis is not primarily the cessation of the discharge, but the cure of the pathologic process on which it depends. The discharge is but a symptom and its relief is incidental to the cure of the disease. Since, however, the latter is never completely cured until the former stops, we may regard the two, from the standpoint of treatment, as synonymous. Our treatment should be directed, in some cases, to the general health, in many cases to the state of the nose, nasopharynx and Eustachian tubes, and in all cases to the seat of the suppuration in the middle-ear cavity and its immediate adnexa.

In some cases the continuance of the suppuration is maintained by systemic dyscrasia, impoverished or depraved states of the blood and general lowering of the

vitality. For such patients iron, quinin, arsenic, manganese, or strychnin, should be prescribed, and fresh air, exercise and a proper hygienic environment insisted on.

Where either tuberculosis or lues is present, it is of course impossible to get results unless the general condition receives its appropriate general treatment. Infection from the nasopharynx by the Eustachian tubes is in almost all cases the original cause of the otitis. Attention to these parts is therefore very important to the successful cure of this disease.

In children a chronic suppuration of the ear that has not been left by either measles, diphtheria or scarlatina is almost certainly dependent on adenoids. In cases in which adenoid growths are present their thorough removal should be the first step adopted toward bringing about a cure. In some cases it is all that is necessary. In many cases of adults in which adenoids might not be suspected, there will be found, on careful examination, a little growth lurking in the fossa of Rosenmüller close to the mouth of the tube, which is a frequent source of infection passing through to the middle ear. A careful curettement of this region in such cases may prove a great help to treatment.

PRINCIPLES OF TREATMENT

As to the local treatment to be directed to the ear itself, there are various agents and various means of using them, but they will be found, all of them, to be based on one, or a combination of the following three principles:

1. The removal of the purulent secretion or other products of the disease process.

2. The sterilization of the parts and the prevention of sepsis.

3. The use of selected medicinal agents to assist Nature in restoring the diseased parts to a normal healthy condition.

Very few of the measures ordinarily employed are limited to one of these principles alone. As a rule they endeavor to combine two or, it may be, all three.

1. Of agents used strictly for cleansing the parts and the removal of secretions, we have Politzerization, irrigation with sterile water and the employment of a suction apparatus at the external meatus. If there is a sufficient perforation in the drum-membrane, Politzerization may be done with impunity. The fear that secretion may be driven into the accessory pneumatic cavities is not well founded. With a well-open drum-membrane experiments have amply demonstrated that the blast of air coming through the Eustachian tube drives everything to the external meatus. I have been in the habit, however, of first seeing that the pharyngeal mouth of the Eustachian tube is free of secretion and as sterile as we can make it by local application of antiseptics, to avoid bringing fresh infection from the nasopharynx. When irrigation is done with simple sterile water, it is done, of course, to fulfil only the first indication, viz., that of cleansing the parts. The use of a normal saline solution materially assists this function, as thereby the albuminous products are dissolved and are more effectually removed. As a rule, however, the practice is to use for irrigating purposes solutions that are actually germicidal, it being the aim of these not only to cleanse, but to have some beneficial effect at the same time in sterilizing the affected parts.

Of methods aimed to remove secretion, a valuable one is the rarefication of the air in the external meatus. This has been practiced for some time, but has recently come more into vogue by reason of the construction of effective suction apparatus adapted to this end. The Fowler apparatus which I have used with apparent benefit combines the suction principle with irrigation, the vacuum being produced by siphonage.

Of methods which depend on the cure of an otorrhea by virtue of a cleansing alone, we should mention one that is extolled by some specialists as the only correct method, namely, the frequent mopping out of the secretion from the canal by the use of cotton-tipped applicators. When this is done to the exclusion of irrigation it is spoken of as the "dry treatment." It has many advantages, but requires painstaking attention on the part of the physician, or that the patient shall be unusually careful, intelligent and persevering. It is much better applicable in cases of acute suppuration than in chronic cases.

The same is to be said of what is termed the "wick treatment," meaning the frequent introduction of sterile or antiseptic strips of gauze into the depths of the canal to be left *in situ* a certain number of hours for the purpose of absorbing the secretion as fast as it forms. This is my favorite method of treatment in acute suppuration, but it is too tedious to be carried out faithfully in long-standing chronic otorrhea.

Under the head of cleansing agents I might mention those which are intended to digest or dissolve the products of inflammation. I have especially in mind enzymol and peroxid of hydrogen. The latter is used with certain precautions to meet special indications. It is undoubtedly an excellent cleansing agent as well as a good antiseptic. When the dioxid is decomposed the bactericidal action of the liberated nascent oxygen is exerted throughout the cavity, and the active effervescence serves a good purpose in dislodging the purulent material and getting rid of it in a way that syringing alone could not so successfully accomplish. I do not share the fear of those who hesitate to use it thinking that thereby they will cause a spread of the disease to unaffected parts. There is no place that it can carry infection where it does not already exist and wherever it goes it naturally exerts a favorable influence.

2. The second principle which I have named as applying in the local treatment of discharging ear is one that has both a passive and an active function, the former consisting in the maintenance of aseptic conditions by the avoidance of additional infection from the outside; the latter in the use of directly active germicidal agents with a view to overcoming as far as possible the septic conditions already present.

The passive part of this proposition should of course be kept in view and respected, no matter what treatment is used. When we reflect that we are dealing with parts separated by the thinnest partitions from surrounding vital organs, where infection generally means death, we should appreciate the importance of scrupulous asepsis. But in addition to a mere passive asepsis, much is expected in suppurative otitis by the employment of active germicidal agents brought into contact with the suppurating focus. It is the custom to add some antiseptic agent to the solution used in irrigating the ears, and drugs which come more properly under the next class to be mentioned depend in no little measure on their antiseptic properties.

3. This third class, however, includes especially those agents which are recommended and used because of

their supposed direct therapeutic action on diseased mucous membrane.

Incidentally, as stated, these agents have usually considerable antiseptic properties, and therefore exert favorable influence in preventing decomposition and putrefaction. But apart from this they are given because of their special physiologic action, which renders them valuable agents in this condition. They will be seen to excite often marked reactions, altering for the better the circulation and nutrition of the parts. In other cases they promote an absorption of the round cells, while to still others they act by destroying necrosed tissues. The agents used are chiefly astringents, stimulants, alterative desiccants, caustics and absorbifacients.

METHODS OF APPLYING MEDICATION

There are three methods that can be employed in bringing medicinal agents in contact with the diseased surfaces of the middle ear cavities, viz., irrigation, insufflation and instillation.

By irrigation is meant the directing of a liberal quantity of solution through the external auditory canal, which in case of a sufficient defect in the drum-membrane will accomplish a general cleansing of the tympanic cavity. It may be done by means of a bulb or piston hand syringe or by the use of a fountain irrigation bag with a proper nozzle. The solution should have a temperature of 90 to 100 F., and care should be taken to use only moderate force. Too great a pressure will produce often a very unpleasant vertigo. To avoid this it is well to have the nozzle of the instrument so placed that the stream will be directed against the upper or posterior wall, instead of going straight inward. After irrigation, the canal should be dried as thoroughly as possible with cotton-tipped applicators.

Of solutions which are recommended for use in this way I may mention boric acid, 4 per cent., phenol, 1 to 2 per cent., liquor cresolis compositus, 1 to 2 per cent., liquor formaldehydi, 1 to 2,000, mercury bichlorid 1 to 5,000.

The objection to irrigation, at least when frequently practiced, is that it tends to produce maceration of the parts and favors sloughing. Heat and moisture are, moreover, as is well known, the two chief requirements for the growth of bacteria and perhaps for that reason should be avoided where possible. As done by the patient it is generally inefficient and I am of the opinion of Gleason that "discharging ears do better under methods of treatment in which syringing has little or no part." At times, however, it is indispensable, at least in the beginning of the treatment.

Insufflation is the blowing of a powder into the canal of the ear to become spread over the diseased parts. Various powders are used, but mainly boric acid, aristol, europhen and iodoform. They are aimed to have a drying effect on the membrane and at the same time to exert a germicidal action. Powders should not be used unless there is an almost or complete destruction of the drum membrane and the discharge happens to be very scant. If these precautions are disregarded, caking is likely to occur, and it may be that the perforation in the drum will be clogged, interfering with drainage. This, of course, is dangerous. In all cases in which the use of powder is contemplated an otoscopic examination must be first made, and the ear again carefully inspected from time to time to ascertain the state of things.

Instillation means the dropping of a small quantity of any fluid medicinal agent in the canal, with the intention that it shall arrive at the diseased parts and there produce its healing effects. It is especially designed for the introduction of agents which have for their purpose the fulfilling of the third of the indications, following my classification. This method, I believe, is the ideal one for the treatment of the chronic form of otitis. In this condition profound changes have taken place in certain parts of the middle ear, and it is necessary to reach them if we are to get results. It is only by the instillation method, properly done, as I hope to point out, that the medicine can be made to arrive successfully at the desired place, especially in a degree of concentration sufficient for the purpose.

Permit me to call attention briefly to one or two points in the anatomy and pathology directly relevant to the main points of my contention.

The tympanic cavity, it must be remembered, does not constitute of itself the entire middle ear. Situated above and behind this cavity lies the so-called antrum, the largest of the mastoid cells. This cell is connected directly with the tympanic cavity by a channel, the aditus and antrum, through which the lining of these two cavities become continuous. It is a well-known fact that in all cases of profuse suppurative otitis, the antrum, no less than the tympanic cavity itself, must be regarded as the source of the discharge. The tympanic cavity being more accessible to treatment, and besides being the more advantageously situated for drainage, naturally yields the more readily to treatment and returns the sooner to normal. In favorable cases inflammation of the antral walls subsides *pari passu*, and the case terminates in recovery with a complete cessation of all discharge.

But it often happens that the virulency of the infection is such that, though the tympanic cavity proper may clear up, the antrum still lingers in the throes of the suppurative process. Sometimes the aditus or channel connecting these two cavities becomes much narrowed by the inflammatory thickening of the wall or the presence of inspissated secretions, which naturally increases the difficulties of drainage and may lead to a complete imprisonment of the purulent matter in the antral cavity.

Let no one object that these statements are merely theoretical and speculative. Otologists know well enough that they are based on undisputed pathologic facts as revealed by the findings of autopsy and the experience of the mastoid surgeon. Those who are in the habit of opening the mastoid process so frequently encounter an antrum filled with granulation tissue, cholesteatoma, polyps and other products of a degenerated mucosa in cases of old suppurative otitis, that there is never a doubt in their minds that here lies the focus chiefly responsible for the persistence of the discharge. In view of these facts the futility of attempting to cure old otorrheas by the methods ordinarily practiced must be evident.

What more can the routine syringing of the ear accomplish than merely clearing out such secretions as are present in the tympanic cavity? The irrigating fluid, supposing the drum-membrane defect to be adequate, flows through the opening and returns without coming in contact at all with the region which most requires treatment. Even though some of the fluid did succeed in reaching the more remote recesses of the middle ear, it could not be expected to have any very decided effect, as only dilute solutions of mildly antiseptic qualities can be employed in this fashion.

In the classes of cases under discussion it is necessary not only to employ medicaments of extraordinary strength and potency, but also to be sure that they are brought into direct contact with the parts particularly affected, if we are to secure results. This object can best be realized by the employment of instillations. The usual manner of employing instillations is to have the patient flex the head laterally or to lie on one side with the diseased ear uppermost, when the fluid is dropped into the ear, whereafter he immediately assumes again the erect position. If the object to be accomplished be to bring the medicament especially in contact with the internal wall of the tympanic cavity, then this manner of procedure is to be commended. But the internal wall is the most resistant of all to necrotic processes and therefore the one we can best afford to neglect.

As I have already, I hope, made sufficiently clear, the region to which it is essential to direct the healing fluid is the antrum, located a little above as well as behind the tympanic cavity. To do this it is necessary to have the head in such a position that when the fluid is dropped into the auditory canal it will gravitate upward and backward and find its way through the aditus. Instead, therefore, of inclining sidewise, the patient should be recumbent, with the head in a position of overextension. It is a good plan to order the instillation to be used at the patient's hour for retiring, in which case we can be sure that sufficient time will be allowed to enable the fluid to percolate to the deepest recesses and be a sufficiently long time in contact with the diseased parts.

Of course the patient needs, first of all, to assume the lateral position with the affected ear upward, for the drops must enter the tympanic cavity before they arrive at the aditus of the antrum. When time enough has elapsed for this—but a few seconds if the defect in the membrana tympani is large—the position must be changed to the recumbent. In order to get the overextension needed to have the fluid go upward as well as backward, it is well to direct the patient to place a bolster under the back of the neck or shoulders in such a way that the head can fall backward. As regards the best agent to use, it is to be borne in mind that for these old stubborn chronic cases, in which the membranes are thickened and degenerated and the walls perhaps carious, the mild antiseptic solutions used in ordinary irrigation will be generally ineffective. We must employ remedies of exceptional virtues. The best agent for this method is alcohol, either alone or serving as a menstruum for other drugs, such as boric acid, iodin, silver nitrate, mercuric bichlorid, liquor formaldehydi and resorcin.

Alcohol not only is a splendid antiseptic, but also has dehydrating properties that commend it especially in this class of cases. In the case of granulations or polyps its tendency to produce a shrinkage or ultimate devitalization of these structures makes it particularly valuable. Absolute alcohol in some patients gives rise to so much smarting that they will object to its use. They can, however, be brought eventually to tolerate the full strength by a process of beginning with a 50 per cent. dilution with water and gradually increasing day by day the proportion of the alcohol. Other patients will tolerate the full strength at once if we adopt the plan of first instilling a mere drop or two, and then waiting a few seconds before putting it in freely. To get results from the instillation method, as from any other, the first requisite is to get the middle-ear cavities as clear as possible. This can be done by any of the methods I have mentioned in discussing the first indication of treatment.

Irrigation may occasionally be necessary, but its general use should be discouraged, and when it has been used the canal of the ear should be mopped and the parts thoroughly dried. I am in the habit of preceding the alcohol treatment by a two weeks' course of enzymol or hydrogen peroxid, each 50 per cent., administered by the same method. The object of these drugs is to digest and assist in the removal of the debris, thus preparing the way for the curative agents.

The alcoholic instillations may be used every day, every other day or even twice a day, according to the case, always having regard for the postural requirement as I have specified. About once a week a preparation of silver may be used of a strength varying from 1 to 5 per cent., or of tincture of iodin, 1 part to 10 of alcohol. The latter preparation is one of special value, but cannot be used frequently because of irritation which would be caused. Silver nitrate must also be used cautiously on account of the reaction which follows.

In certain of the London clinics anilin oil is highly extolled, used by instillation, for the cure of suppurative otitis. It has undoubtedly rare penetrating qualities which render it very efficacious, but it cannot be generally recommended because of the cyanosis which is likely to follow, even when only a few drops are used. Especially ought it to be avoided in the case of children. Individualization is of course necessary in the selection and use of a remedy, as each case is different in some respect from every other.

A preliminary otoscopic examination is important, to discover the size and location of the aperture in the tympanic membrane and the existence or other obstructive conditions which interfere with the drainage. Not infrequently in these cases the bottom of the canal will be found filled with the epithelial debris mixed perhaps with inspissated pus, constituting a serious hindrance to drainage. In other cases polyps and granulation tissue are seen protruding from the tympanic cavity and occasionally large cholesteatomatous masses are present. Unless such conditions first receive our attention, all efforts to bring about a cure by other methods will be defeated.

There will be, of course, a certain number of cases of old chronic otorrhea dependent on such profound and extensive bone destruction that nothing short of radical surgery can be effective. But I am convinced that the proportion can be greatly lessened and many apparently hopeless patients finally healed by assiduous local treatment, and especially by scrupulous attention to the few principles which I have emphasized in this paper.

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Discovery of the Transmission of Disease-Causing Protozoa.—We are justified in having no little pride in the fact that two of our countrymen, Smith and Kilbourne, in 1893 actually proved for the first time the transmission of disease-causing protozoa by blood-sucking arthropods. The honor for their discoveries and patient observations and experiments on Babesia in connection with Texas fever in cattle was not shouted from the ridge-pole, but came with the fact that their results were immediately applied to human diseases. To Smith and Kilbourne, then, belong a great part of the credit and honor of paving the way to the present-day control of malaria and sleeping-sickness, and the practical extinction of yellow fever in epidermic form.—G. N. Calkins in *Science*.

SIGNS AND SYMPTOMS PRESENTED BY THOSE ADDICTED TO COCAIN

OBSERVATIONS IN A SERIES OF TWENTY-THREE CASES

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The individual who is under the influence of a non-toxic amount of cocain, or its synthetic substitutes, experiences a sense of elation associated with increased mental and physical vigor. There exists a feeling of physical beatitude and exquisite pleasure. One seems to be in an atmosphere of new life where worries are unknown and all is a delightful calm. M. Montegazza, who had experimented with himself by administering a considerable quantity of the drug, exclaimed to his friends when sufficiently recovered that "God was unjust in that he made man to live without eating coca." "I prefer a life of ten years of coca to one of one thousand years without it." The brain and muscular system are extraordinarily stimulated, and one may accomplish tests of physical endurance which under ordinary conditions would be impossible. From the days of the Incas, the natives of Western South America have eaten the leaves of the *Erythroxylon coca* when performing long journeys and similar physical efforts.

Four patient in my series who had been morphinomaniacs asserted that the effects of cocain were far more enticing than those of morphin. The wholly agreeable effects enumerated above are the incentives for the individual with peculiar susceptibilities or morbid inclination.

As an aid to diagnosis it is of paramount importance to determine the method adopted by the habitué in taking cocain. Of the total twenty-three cases of this series, twenty-one administered the drug by way of the nasal chamber, similar to the manner of using snuff. The employment of the hypodermic needle is infrequent and was only observed in two instances. Application of a solution of cocain to the gums was noted in two devotees who used this method in conjunction with snuffing.

The clinical manifestations of cocainism are varied and confusing. In order to describe more definitely these manifestations of the habitué the signs and symptoms will be classified as incident to acute or chronic cocainism.

The eight cases of acute cocainism studied in this series occurred in old offenders who had taken more than their usual amount. The following symptoms were presented by this group: The pulse-rate was increased and ranged between 82 and 120 per minute. The respirations were varied, occasionally prolonged and less frequent than normal, more often rapid, irregular or sighing. The body heat was increased, the highest recorded temperature being 102.4 F. The body and extremities occasionally performed strange contortions due to spasmodic twitchings and convulsive seizures. In a case of this character the muscles contracted producing opisthotonos and by a sudden movement the patient would contract and hurl himself from the bed. I have seen similar convulsive seizures in tetanus. Emotional excitement and incoordinations are common. A devotee who presented the signs of acute mania was in the act of tearing his clothing from his body. A man under the influence of cocain went overboard. He was unconscious when taken from the water, but on being resuscitated exhibited the exhilarations and incoordinations of alcoholic intoxication. Hallucinations were not infrequently marked, including those of sight and common sensation associated with delusions of persecution, of suspicion and jealousy. Visual and auditory hallucinations with delusions of persecution occurred in a habitué who stated he had snuffed 65 grains of cocain. When apprehended this patient was in the act of procuring his rifle to protect himself from imaginary enemies.

The classical sign of a feeling of vermin crawling over the body has been observed but once. This condition occurred in a woman who was an advanced habitué. In order to convince me of her plight she had passed a score of safety-pins through her breast, believing she had thus secured the legs of the supposed "cocain bugs." A long hat-pin transfixed her left breast.

Following a cocain debauch, temporary insanity may result and two such cases have been under my observation. Restlessness, insomnia, anorexia and hallucinations were common to both patients. Alterations of reflexes, paresthesia and incoordinations were noted. In one of my insanity cases, as the condition advanced, the patient became depressed and sullen, alternating with intervals of hilarity, when he would become emotional and violent. At such times his appearance indicated fear and terror.

The after-effects of acute cocain poisoning are paleness and anemia. The eyes are sunken and have a nervous wandering expression. Tremor was not infrequent.

The symptoms of chronic cocain poisoning are fairly definite. They include dyspepsia, loss of weight, anorexia and a peculiar inability to concentrate the mind. Unfortunately, these symptoms are of small assistance in making a diagnosis, as they are common to all drug habits. The condition of the pupil in chronic cocainism may vary and cannot be depended on.

In two other articles[1] on this subject I indicated ulceration of the nasal fossæ as an aid in detecting suspected cases of cocain snuffing. The following extract from the second of these articles describes this lesion:

> In order to apprehend the unfortunate who is addicted to this evil it is necessary that one explore well the nasal fossæ for possible lesions incident to snuffing, and in a limited number of cases to examine the arms and legs for possible marks of the hypodermic needle.
>
> Within the nasal chamber the most frequent site of inflammation is the pituitary membrane over the cartilaginous septum. The papule, originally small, spreads. The center becomes gray or opalescent and the edges form a clearly defined irregular margin. The inflammation may spread and in one of this series the septum was perforated incident to necrosis of the cartilage. As the result of increased blood-pressure and of the corrosive action of cocain on the Schneiderian membrane, epistaxis is not infrequent. The importance of these signs when noted was such that a confession was sought and obtained in every case.

This nasal lesion was discovered as the result of epistaxis occurring in two men suspected of being addicted to the cocain habit. Examination of the nasal fossæ elicited the lesion which has been described and which subsequent experience has proved to be fairly characteristic. In this series of twenty-three cases, eight patients presented the symptoms of acute cocain poisoning and the diagnosis was not difficult. The apprehension of fourteen habitués depended on the presence of

1. Owens, W. D.: Cocain and Its Relation to the Military Surgeon, Jour. Mil. Surg.: The Importance of Eliminating the Cocain Habitué from the Personnel of the United States Navy and Marine Corps, Navy Med. Bull., April, 1910.

the nasal lesion, while the remaining patient who admitted his habit presented himself for treatment. Thus the importance of examining the nasal chamber in suspected cases of cocainism is clearly indicated, as, previous to the adoption of this routine method of examination, only cases exhibiting the symptoms of acute cocain poisoning had been successfully diagnosed.

I know of six cases in addition to this series, in which the diagnosis depended on the presence of the nasal lesion. These cases have been observed by medical officers of the United States Navy since the publication of the article referred to.

A THIRTY-DAY RHYTHM IN APOPLEXY

PRELIMINARY NOTE ON A NEW FACTOR IN ETIOLOGY AND TREATMENT

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Two years ago I was studying the case-history of a patient who, in the previous twenty-one months, had suffered ten attacks of that type of cerebral hemorrhage which we designate as apoplexy. My attention was held by the fact that, of these ten attacks, seven recurred at the same period of the month, i. e., between the 14th and 19th. The remaining three occurred at a period midway between these dates, i. e., on the 2nd and 4th. This periodicity, too definite to be accidental, suggested the presence of some factor in the etiology which, once understood, might be of service in the treatment.

Case 1.—The patient, a woman over 90, lived the most regular of existences at her country home, and was subject to so few changes of environment that it seemed possible to exclude as an exciting factor of the attacks everything extrinsic to the patient herself. The victim of such attacks for years, she had experienced ten in the twenty-one months since my attendance on the case. These recurred most frequently at a thirty-day interval, but exceptionally with forty-five or sixty days intervening. The severity varied, some appearing so grave that the last rites were hurriedly administered, others being so mild as almost to escape attention.

DEDUCTIONS

The theory that there was a certain period, recurring approximately every thirty days, during which the liability to attack was increased, was put to the test as follows: It was explained to the relatives that as most of the attacks had occurred at a certain period of the month, danger of recurrence at this time was to be guarded against. The patient was placed under careful observation and special precautions were observed throughout the danger period. With the exercise of this prophylactic care during five days only each month, the patient, in the twelve months immediately following, had but one attack. This occurred on the twentieth day of the seventh month, and this possibly due to admittedly relaxed care on the part of her relatives.

AMPLIFICATION OF DATA

In the meantime my practice has furnished six other cases of apoplexy. Two were almost immediately fatal. Four remain and afford interesting evidence.

Case 2.—A woman of 70 suffered a severe attack, followed in forty-five days by a milder one; this followed in thirty days by a very severe one, and this again thirty days later by a slight attack (December 20, February 2, March 4 and April 3). At this point similar precautionary measures were instituted, and no attack has occurred for seven months. At the time of the danger period each month there has been some feeling of discomfort or oppression. The psychologic factor was eliminated by making no mention of a possible periodicity until the success of the investigation was assured.

Case 3.—Patient is a woman of 71, with the history of several "strokes." The last of these was experienced sixty days before she came under my care with a slight cerebral hemorrhage and partial transient hemiplegia. Precautionary treatment was instituted and no attack has occurred in ten months; at each danger period there has been headache and the feeling that an attack was imminent.

Case 4.—A man of 63 had a severe stroke of apoplexy (with considerable hemiplegia remaining) eighteen months ago. No further attacks have occurred. The patient has been constantly under the care of a skilled and devoted nurse, so that practically his whole month has been treated as a danger period. The nurse notes that there have been periods recurring every month or every two months in which the patient was less well, was restless and irritable.

Case 5.—A woman of 51, the subject of a double complete oöphorectomy some twenty years ago, for some time has been subject to apoplectic attacks, many mild in nature, but a few sufficiently marked as to make certain the diagnosis. For a long time she had made the observation that these had a tendency to recur at thirty-day intervals. Two attacks under my care with thirty days between, then no attacks for three months, when she passed out of my hands.

Some of these cases, conspicuously the last, may at first sight appear to be incomplete or to have been observed for too inconsiderable a period of time. They are included because, being all the material available, and all on some point agreeing with the theory, no one of them in any particular contradicts it. Their inclusion receives added justification by their possessing in common a feature to be referred to immediately.

THEORIES

Apoplexy is largely a matter of hydromechanics. The hemorrhage may arise from one or two factors—undue weakness of the vessel-wall or undue pressure of the blood-stream. It is improbable that the strength of a vessel-wall fluctuates to any extent either with, or without, a rhythmic periodicity. On the other hand, the contained blood-stream is subject to wide variations of pressure. Is there any evidence that this pressure can vary with a thirty-day rhythm? In the five cases enumerated above, series of blood-pressure readings, extending through several months, were taken as frequently and systematically as circumstances allowed. These observations furnished evidence that during the portion of the month designated as the danger period there was a rise of blood-pressure considerably above the average daily maximum for the rest of the month. To illustrate: In Case 2 the average daily maximum pressure for the non-danger period was 135 mm.; in one danger period this rose above 150, and in two was over 160. In Case 3 the readings were 140 for the average maximum, 175 in an attack, and 168 in a danger period during which no attack supervened. All patients gave higher readings during their respective danger periods.

Accepting this excessive blood-pressure as immediately responsible for the hemorrhage, we must admit that this itself is but the result of other factors among which we must seek the original cause. Many circumstances contribute to blood-pressure variations. Five stand out as reasonably more probable than the rest. These are: (1) nervous control; (2) mechanical changes compensatory to abnormalities elsewhere (as in cirrhosis of certain organs); (3) products of germ or parasitic activity; (4) disturbances of metabolism; (5) the internal secretion of certain glands.

The first three seem entitled to little consideration. The nervous system (certain energy-discharging ganglia excepted) is rather concerned in the conveyance of impulses already existing than in originating these *de novo*. Similarly the mechanical factor is but an adjustment compensatory to changed conditions elsewhere. Neither of these fits in with the required premise of periodicity. There is nothing inconsistent in the possibility of a germ or parasite operating in a thirty-day cycle, and at one period of this cycle of development discharging certain toxins which might cause elevation of blood-pressure, as the organism of malaria causes its tertian phenomena. It seems less probable than other surmises. On the other hand, disturbances of metabolism, especially of those organs concerned in the assimilation of food and elimination of waste products, cause the appearance in the blood-stream of certain pressor substances. But again the necessary agreement with our premise in the matter of periodicity is lacking. Does not this rhythm—this periodicity—favor the supposition that we have to deal with manifestations of activity on the part of some gland or group of glands having an internal secretion—for example, the thyroid, adrenals, pituitary or ovaries? We know that under given conditions the secretion of the first lowers, while that of the second and of part of the third raises blood-pressure. We know that commonly the ovary functions in a twenty-eight-day cycle; it did so in the menstrual life of these women. In Case 4 it might be necessary to argue for the testicular internal secretion functions analogous to those of the ovary in the other cases, did not Case 5 allow ovarian function to be eliminated from consideration. Possibly we are dealing with the unrecognized secretion of some well-known structure, for example, an internal secretion of kidneys or intestine; or the search may lead to glandular elements of which we know nothing. Here the problem must be left to await further investigation.

The fact that we have a means of diminishing the liability to, and the consequences of, apoplexy in these recurrent cases justifies us in using it without waiting for the disclosure of its *modus operandi*.

TREATMENT

It would be out of place in a preliminary note of this character to say more concerning a treatment still in the elementary stages of elaboration than to state that increased attention to the avenue of elimination during these so-called danger periods appears mainly responsible for the results quoted. Beyond this, the experimental stage of the work counsels the withholding of incomplete, and possibly misleading, results.

SUMMARY

Five consecutive cases of apoplexy show a marked periodicity in their recurrence. The danger periods appear not to exceed five days and to recur at approximately thirty-day intervals. Prophylactic treatment during these danger periods alone has lessened very materially both the frequency and severity of the attacks. During these danger periods the blood-pressure carried by the cases of the series was much in excess of that for the remainder of the month. The ultimate cause appears obscure. It is suggested that the phenomenon may be due to (1) influences originating in the nervous system; (2) the products of germ or parasitic activity; (3) mechanical compensatory changes of blood-pressure; (4) disturbance of metabolism, assimilative or eliminative, or (5) to the function, or disturbance of function, of a gland or chain of glands possessing an internal secretion.

HEXAMETHYLENAMIN IN THE TREATMENT OF BRONCHITIS *

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Since the introduction of hexamethylenamin as a medicine in 1894, its therapeutic indications have been greatly extended and its value demonstrated in a variety of infections. This drug was first employed as a urinary antiseptic by Nicolaier,[1] and continues to be recognized as the most reliable remedy to prevent the growth of bacteria in the urine.[2] The investigations of Crowe,[3] in 1908, with his further report[4] in 1909, showed that after its administration by mouth, hexamethylenamin can be demonstrated in the bile, cerebrospinal fluid, synovial fluid, saliva, pleural effusion, and blood of man. He contended further that doses of this drug, within therapeutic limits, exercise a decided inhibitory effect on the growth of organisms in the bile and cerebrospinal fluid In 1910, Barton[5] reported an interesting case of suppurative otitis media in which the discharge ceased quite promptly after the administration of hexamethylenamin, and the presence of the drug in the secretion was demonstrated on two successive days.

As a result of the suggestive reasoning in the foregoing reports, showing the excretion of hexamethylenamin and its decomposition products by both serous and mucous surfaces, I began to employ this drug in the fall of 1910 in all cases of common colds that came under my observation, and in patients suffering from acute and chronic bronchitis. It was intended to further investigate such cases in regard to the presence of hexamethylenamin in the sputum, but reference to the literature disclosed the report of Armstrong and Goodman,[6] who were able to detect the drug without difficulty in the sputum of patients suffering from pulmonary tuberculosis, pneumonia, bronchitis and asthma, after a daily dose by mouth of 25 gr. These authors did not attempt to study its effect on pulmonary conditions, but suggested that it might be used to advantage in certain infections of the respiratory tract. Further search through the current journals disclosed the two brief reports of Heitmuller[7] and Miller,[8] in which the use of hexamethylenamin was advocated as a remedy in acute colds and in bronchitis.

Hexamethylenamin is made by the action of ammonia on formaldehyd. It is readily hydrolized by heat, dilute acids, etc., into its two components. When administered as a drug, part of it is excreted unchanged, but sufficient decomposition takes place to render its formaldehyd radicle of value. The usual daily dose in the case of adults is from 1 to 1.5 gm. (15 to 22½ grains), but as much as 5 gm. (75 grains) has been given per day with-

* Read before the Forty-Second Annual Meeting of the Medical Society of Virginia, Richmond, Va., Oct. 24-27, 1911.

1. Nicolaier: Deutsch. med. Wchnschr., 1895, p. 541.
2. Solimann, T.: Formaldehyd Derivatives; Their Fate and Actions in the Body, THE JOURNAL A. M. A., Sept. 5, 1908, p. 818.
3. Crowe, S. J.: The Excretion of Hexamethylenamin in the Bile and Pancreatic Juice, Bull. Johns Hopkins Hosp., 1908, xix, 109.
4. Crowe, S. J.: The Excretion of Hexamethylenamin in the Cerebrospinal Fluid, Bull. Johns Hopkins Hosp., xx, 102.
5. Barton, W. M.: The Elimination of Hexamethylenamin by the Mucous Membrane of the Middle Ear, THE JOURNAL A. M. A., March 12, 1910, p. 871.
6. Armstrong, J. I., and Goodman, E. H.: The Excretion of Salicylic Acid and Hexamethylenamin in the Sputum, THE JOURNAL A. M. A., May 27, 1911, p. 1553.
7. Heitmuller, G. H.: The Excretion of Hexamethylenamin, THE JOURNAL A. M. A., April 9, 1910, p. 1222.
8. Miller, A.: Hexamethylenamin: A Remedy for Common Colds, THE JOURNAL A. M. A., June 10, 1911, p. 1718.

out untoward effects. Hematuria and burning on urination has been noted occasionally after its administration to susceptible patients, and in a few cases a skin rash not unlike measles has followed its use. The experiments of Frothingham,[9] however, showed that guinea-pigs could withstand enormous doses of the drug, one animal, for instance, remaining lively and perfectly well after receiving 375 grains in eight doses during nine days. He concludes that hexamethylenamin in small doses may be considered a safe drug for most people, and that it may be given in large doses up to the appearance of symptoms. Furthermore, when symptoms appear they promptly subside as soon as the drug is withdrawn.

My experience with hexamethylenamin in the treatment of acute colds and acute and chronic bronchitis has been most gratifying. In the cases of individuals subject to severe colds, the stage of coryza has been definitely lessened in length, and in practically all cases the succeeding stage of bronchitis has been slight or missed entirely. It has been used with success in the case of patients awaiting surgical operation, in whom the administration of a general anesthetic has been deferred because of the presence of a cold. In this treatment of colds no other remedies have been employed except an initial purgative and subsequent care to see that the bowels remain open. Early experience soon demonstrated that the dose should be comparatively large, and as a routine 10 grains dissolved in a full glass of water is given four times daily for three to seven days, after which the drug is discontinued. The patient is always instructed to drink water copiously during the time the drug is being taken, and in a rather extensive employment of the remedy I have observed only one case in which the patient complained of any irritation of the bladder, and in this instance the burning on urination ceased very promptly after the drug was omitted. The successful treatment with hexamethylenamin of two cases of chronic antrum infection that had resisted several operative procedures and prolonged local treatments would lead me to recommend this remedy further as a prophylactic against sinus infections liable to be induced by the ordinary cold.

In the treatment of both acute and chronic bronchitis, hexamethylenamin produces results that are incomparable with the usually employed remedies. In some of these cases iodin has been administered along with the hexamethylenamin while in other instances hexamethylenamin has been the only drug used.

This fall a patient presented himself with an acute bronchitis of five days' duration, accompanied by fever and malaise so as to suggest the onset of a typhoid infection. Both sides of the chest were well filled with sonorous and squeaking dry râles and the blood showed the presence of a polynuclear leukocytosis with negative Widal reaction. The acute symptoms subsided in less than forty-eight hours and the illness was terminated in four days after treatment was instituted. In the management of common colds emphasis has always been laid on the institution of treatment at the first sign of the infection. In hexamethylenamin we have a drug that is decidedly effective even if not given until the stage of bronchitis has been reached. Its favorable influence on so-called head colds, while readily demonstrable, is not so pronounced as on the bronchitis in which most acute colds terminate; and its chief value in common colds, as already mentioned, is in preventing the succeeding bronchitis.

Prominent among the stubborn maladies that the physician is called on to treat is the chronic bronchitis of patients of mature years. From a somewhat limited experience in the treatment of such patients with hexamethylenamin, I believe that the cases can be divided into two classes, depending on the presence or absence of marked thickening and calcification of the cartilages, fibrous membrane and muscular structure of the bronchial walls. Hexamethylenamin has failed to ameliorate the symptoms in several patients who presented signs of extreme arteriosclerosis in the peripheral blood-vessels, and in these cases it has been assumed, rightly or wrongly, that the bronchi present a similar sclerotic change. In other instances the effect of hexamethylenamin has seemed truly remarkable, as witnessed in the following instance:

Patient.—In November, 1910, a woman of 50 years presented herself complaining of chronic cough. As a young woman she was subject to acute colds always terminating in bronchitis of several weeks duration. For the past twelve years, however, she had had a cough continuously and did not remember a single day in that period that has been unattended by the cough. Expectoration had been profuse, especially troublesome on retiring and on arising from bed, but has never been blood-tinged. Various physicians had examined the chest without finding evidence of tuberculosis, and had prescribed remedies without improving the symptoms. Frequent examinations of the sputum had been negative for tubercle bacilli.

Examination.—Chest examination revealed scattered moist râles throughout both sides with occasional sonorous râles at either base behind. The percussion note was everywhere resonant with no areas of exaggerated expiration or increased voice transmission. A tuberculin test was negative and *x*-ray plates of the chest showed no areas suggestive of tuberculosis. Peripheral arteries were not palpable. Blood-pressure 132 mm.

Treatment.—Hexamethylenamin was given to this patient in full doses accompanied by small doses of iodin. The immediate effect was so striking that the patient attributed the result to the effect of the *x*-ray exposure of a few seconds time. A letter was received from the patient one month after treatment was instituted, in which she said she was free from cough for the first time in twelve years. She was seen the latter part of January, 1911, and again the first of last March and had had no return of the bronchitis and considered herself as having entirely recovered.

CONCLUSION

Hexamethylenamin is recommended as a remedy of value in cases of acute colds and in patients suffering from acute and chronic bronchitis. The drug should be given in large doses accompanied by the copious drinking of water. In the ordinary cold, treatment with hexamethylenamin shortens the stage of coryza and greatly modifies or entirely prevents the succeeding bronchitis. It also acts as a prophylactic against ensuing infection of the accessory nasal sinuses. It is our best remedy in acute bronchitis. Certain cases of chronic bronchitis respond to treatment by hexamethylenamin with a gratifying alacrity, while others do not. In the latter instance it is presumed that structural changes have occurred in the walls of the bronchi, associated with thickening and calcification of the cartilages, fibrous membrane and muscular coats so as to preclude the hope of successful treatment by any remedy.

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9. Frothingham, C.: The Effect of Hexamethylenamin on Guinea-Pigs, Arch. Int. Med., 1909, iv, 510.

POSSIBLE INTERRELATIONSHIP OF ACANTHOMA ADENOIDES CYSTICUM (MULTIPLE BENIGN CYSTIC EPITHELIOMA) AND SYRINGOCYSTADENOMA (LYMPHANGIOMA TUBEROSUM MULTIPLEX)

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Unna[1] prefers, on anatomic grounds, to group all tumors derived from the prickle-cell layer under the precise and at the same time comprehensive heading of acanthomata. This term, first suggested by Auspitz,[2] serves admirably when it is desired to draw a sharp line of demarcation between these growths and those originating from other cutaneous structures. Unfortunately, in some instances the point of origin is a matter of doubt, and particularly is this true in many of the lesions that have been reported as examples of multiple benign cystic epithelioma. Typical instances of this affection, which was first described almost simultaneously by Brooke[3] and by Fordyce,[4] in 1892, are easily identified histologically, but some of the variant and mixed forms are extremely difficult to classify.

The tumor of this type which has given rise to the greatest amount of controversy is one first reported by Biesiadecki[5] and Kaposi,[6] and named by them "lymphangioma tuberosum multiplex." While it is generally conceded that these authors were mistaken regarding the origin of the growths, the designation bestowed by them has been allowed to stand, partly on account of priority, but principally because of the indefiniteness of our knowledge concerning the origin of the epithelial processes of which the tumors are largely composed. The sources from which the epithelium can be derived are limited — it must come directly from the prickle layer of the skin or hair follicle, from the coil or duct of the sweat apparatus, or from the endothelium of the blood-vessels, or, theoretically, it may develop from misplaced embryonic rudiments of one or more of these structures (a so-called Cohnheim's rest, or, according to Ribbert's theory of mechanic isolation, from cells that accident has removed from the influence of normal cell association).

An idea of the lack of unanimity of opinion among the various investigators may be gained by a very casual survey of the literature. Almost every observer has seen fit to rename the affection, giving it a title that corresponded with his conception of the origin of the epithelial accumulations. The resulting cognomens vary from the "cellulome épithélial éruptif" of Quinquaud,[7] and the "nævi épithéliaux kystiques" of Besnier[8] to the "hæmangendothelioma cutis papulosum" of Waldheim[9] and the "nævi cyst-epitheliomatosi disseminiti" of Gassmann.[10] Recently we have had an opportunity to make a comparative study of multiple benign cystic epithelioma and lymphangioma tuberosum multiplex, and the findings are of interest as serving to emphasize the necessity of separately classifying these two varieties of non-malignant, cystic, cutaneous neoplasms.

CASE REPORTS

CASE 1.—*Patient.*—A. M., male, married, laborer, aged 70 years, was first admitted to Dr. Walter Sutton's service (surgical) at the University Dispensary in April, 1911. His case was there diagnosed as one of multiple benign cystic epithelioma by Prof. W. K. Trimble, to whom some of the biopsied material had been sent for microscopic examination. When the clinic for skin diseases was opened in October, Dr. Sutton kindly referred the patient to us for further observation and treatment.

Family History.—The cutaneous history of the family is negative. The patient has been twice married, and has seven children, aged from 12 to 40 years, all of whom are living and in good health. So far as the father knows, none of them has ever been troubled with a skin disease of any kind.

FIG. 1.—Acanthoma adenoides cysticum, showing epithelial strands extending inward from prickle-cell layer with numerous cysts. (Spencer ⅙ obj. No ocular.) Case 1.

Personal History.—The patient is a native of Ohio, and a resident of Missouri. His general health has always been fairly good. At various times, however, he has suffered from rheumatism, eczema, seborrheic dermatitis, and urticaria.

Present Illness.—The small tumors on the patient's forehead, neck, and back have been present ever since he can recollect. One of the larger growths, on the left side of the neck, became hard and indurated in June, 1911, and ulcerated a few weeks later. Clinically, a typical rodent ulcer resulted, and the entire lesion was excised by Dr. Walter Sutton in August, 1911.

Examination.—The patient was a well-nourished man, and appeared to be much younger than his age would indicate. The Wassermann sero-reaction was negative, and there was no response to tuberculin. There was some senile atrophy of the skin, particularly on the backs of the hands. The hair was thin, and there was considerable branny scaliness (seborrheic) on the scalp and face. There were a few pigmented nevi on the chest and back. The skin of the trunk was reddened, and there was a decided tendency to dermographism. Irregularly scattered over the scalp, temples, neck, and chest were a num-

1. Unna: Histopathology of the Diseases of the Skin. Transl. by Walker. Macmillan Company, New York, 1896, p. 784.
2. Auspitz: Lehrbuch der Hautkrankheiten, Vienna, 1881.
3. Brooke: Brit. Jour. Dermat., 1892, p. 269.
4. Fordyce: Jour. Cutan. Dis., 1892, p. 459.
5. Biesiadecki: Untersuchungen aus dem pathol.-anat. Institute im Krakau, 1872, p. 2.
6. Kaposi: Hebra's Lehrbuch der Hautkrankheiten, Ferd. Enke, Stuttgart, 1876, ii, 282.
7. Quinquaud: Tr. Internat. Cong. Dermat., Paris, 1889, p. 412.
8. Besnier and Doyon's translation of Kaposi's Pathologie und Therapie der Hautkrankheiten, ii, 367.
9. Waldheim: Arch. f. Dermat. u. Syph., 1902, p. 225.
10. Gassmann: Arch. f. Dermat. u. Syph., 1901, p. 177.

ber, seven in all, of the small, pink, nodular tumors characteristic of multiple benign cystic epithelioma. The growths varied in size from a grain of wheat to a split pea, and did not disappear on pressure.

Histopathology.—Two of the lesions were excised for laboratory purposes, one from the left scapular region, the other from the right temple. The first piece of tissue was frozen and cut, the sections being stained by the usual methods. The second was fixed in formaldehyd solution, and mounted in paraffin. The findings were practically identical in the two tumors. The corium was somewhat disorganized, considerable quantities of blood, and large numbers of infiltrating round cells being present. No hair follicles, or sebaceous or coil glands were found in either of the specimens. Extending downward into the cutis from the basal layer of the epidermis were numerous long, slender chains of epithelium, two or three cells in width, which terminated in bulb-like cysts, filled with colloid substance and corneous material. Several snared-off sebaceous masses, such as have been described by Csillag,[11] were also to be seen. The chains were composed of cylindrical epithelium which reacted to the various stains in a manner exactly similar to the apparently normal cells in the overlying epidermis. No free tracts were to be found. The outermost covering of the club-shaped projections consisted always of a layer of cylindrical epithelium—in no instance could the presence of a double row of flattened, regularly arranged cells be demonstrated—and an inner zone of

Fig. 2.—Syringocystadenoma. Section from apparently normal area on left side of body. Macroscopically, no tumors were visible. (Spencer ⅛ obj. No ocular.) Case 2.

imperfectly stained, rounded epithelial cells, encircling a central mass of débris.

CASE 2.—*Patient.*—M. D., female, married, housewife, aged 39, was a patient of Drs. J. Phillip Kanoky and Richard L. Sutton, and we are indebted to Dr. Kanoky for permission to record the history and the microscopic findings.

Family History.—So far as the patient is able to discover, no other member of the family has ever had a similar disorder. She is the mother of three children, aged 16, 9 and 3 years respectively, all of whom are living and well.

Personal History.—The patient is a native of Missouri, and a resident of Kansas City. Her general health has never been good, although she has experienced no severe illnesses. She never feels well during the excessively hot weather, and ascribes her weakness and discomfort to her inability to perspire freely, a peculiarity to which she has been subject ever since she can remember.

Present Illness.—For many years there have been present numerous small, whitish or pinkish papules, varying in size from a hemp-seed to the half of a soup-bean, on both sides of the patient's forehead, and on the right side of her chest, near the anterior axillary border. The little tumors have never given rise to subjective symptoms, and slight attention has been paid to them.

Examination.—The patient is a brunette, with brown eyes and hair. Her skin is soft, smooth and flexible. There are a few acne lesions on the left side of the chin, and a slight tendency to rosacea over the nasolabial folds. The Wassermann test is negative, but there is a slight reaction to tuberculin. Irregularly arranged on the left side of the forehead are about twenty small, soft, flattened, pinkish-white, smooth-topped papules, somewhat larger than the head of an ordinary pin, and oval or circular in outline. The group forms a rectangular patch, 4 cm. wide and 6 cm. long. In some instances the lesions have apparently coalesced, the resulting tumor being irregularly fusiform in shape. There is a similar but smaller collection of lesions over the right temple.

On the right side of the chest, near the anterior border of the axilla, is a third group of the tumors, their arrangement appearing to bear some relation to Heitzmann's lines of cleavage. The individual lesions in this collection are more sharply outlined, and the tops are more pointed than those on the forehead. Following the administration of pilocarpin hydrochlorid, 0.01 gm. hypodermatically, drops of moisture appeared on the tops of some but not all of the lesions. At this time, while the patient was perspiring quite freely, the tumors were perceptibly increased in size, and distinctly more prominent than before the drug was given.

Fig. 3.—Syringocystadenoma, showing epithelial strands and cysts in the corium. (Spencer ⅛ obj. No ocular.) Case 2.

Histopathology.—At various times, eleven of the growths, two from the forehead and nine from the axilla, together with two pieces of macroscopically normal skin from the sides of the trunk, were excised for microscopic study. The material was fixed in alcohol, formalin, or Zenker's solution. Two of the nodules were sectioned in a freezing microtome, and stained with scarlet R and Sudan III, alum-hematoxylin being used as a nuclear stain. The remainder of the material was mounted in celloidin or in paraffin, and cut at various angles (perpendicularly to, diagonally to, and parallel with, the surface), and the sections afterward stained with the usual dyes. In all, about eleven hundred sections were examined.

The pathologic changes in the epidermis were almost identical with those seen in Charles J. White's[12] case—an unchanged stratum corneum, a thinned granular layer almost devoid of granules, and a rete having a regularly arranged basal layer but composed of swollen, edematous cells, the nuclei of which were large and vesicular, and separated from the encompassing cytoplasm by a considerable space. In the majority of the specimens, the papillæ were flattened or entirely absent. There was some cellular infiltration in the upper corium, but the blood-vessels, which were considerably lessened in number, exhibited no inflammatory changes, and the capillary endothelium appeared normal in every way.

11. Csillag: Arch. f. Dermat. u. Syph., 1906, p. 163.

12. White: Jour. Cutan. Dis., 1907, p. 49.

The elastic tissue was somewhat reduced in amount, although the distribution of the fibers was but little altered and the elastic network completely encircled the cysts, as in the cases reported by Dohi,[13] Gassmann and Stockmann.[14] Hair follicles and sebaceous glands were found in all of the nodules. Both the follicles and the appended glandular elements appeared to be normal. In those instances in which a complete longitudinal section of a hair follicle was secured, no budding or other abnormal condition was to be found. Occasionally, one of the long, wavy strands of epithelial cells, to be described later, was found in very close proximity to a pilo-sebaceous appendage, but careful search through the serial sections always showed the extremities to be free, and not connected with the follicle in any way. In addition, the reaction of the component parts of the two structures to the various aniline dyes was entirely different, and invariably served as a trustworthy method of identification.

The coil-glands were well developed, and exhibited no pathologic changes. In several instances the ducts could be traced, entirely to the surface of the skin. There was no evidence of dilatation, or of cystic degeneration in either coil or duct, and no indication of budding or of other abnormal cell proliferation.

There was some collagenous degeneration of the connective tissue stroma, but the change was not marked.

Scattered through the cutis, from just below the basal layer of the epidermis down to the stratum of subcutaneous fat, were large numbers of round or oval masses of epithelium, and epithelial-lined tubules. Many of these cell collections possessed a stem-like appendage of epithelial cells, two cells in width, which frequently connected two or more of the glandular masses. In many instances these epithelial tracts were found extending in various directions through the corium. The nuclei of the cells were large, and stained much more deeply than those in the epidermis.

In several of the macroscopically normal sections from both sides of the trunk similar strands of epithelial cells were found, and in one specimen several budding processes and a few cysts were present. It would have been interesting to study sections of skin from parts of the body that are not so rich in coil glands as the axillæ, but further material was refused.

Case 1 is a classic example of multiple benign cystic epithelioma as originally described by Brooke and by Fordyce.

C. J. White,[15] Jarisch[16] and Stelwagon[17] have reported similar cases in which the tumors underwent degenerative changes and exhibited evidence of malignancy. In this instance, the somewhat unusual sequel might be partially explained by the concomitant seborrheic dermatitis, which had been present for many years.

In Case 2, we have a typical representative of the Jacquet-Darier group. In general there has been such a remarkable uniformity in the reported cases referred to this group that it is exceedingly improbable that, as claimed by Möller,[18] some are of endothelial and others of epithelial origin. While it is true that actual connection of the epithelial strands and cysts with pre-existing sweat-glands has been missed by the majority of investigators, there are now several well authenticated instances in which such connection has been recognized.[19]

Hartzell[20] has reported a unique neoplasm which resembled in some respects both benign cystic epithelioma and lymphangioma tuberosum multiplex. Frequently long, slender, epithelial branches were found extending from the sides of the follicles (as in the "tricoepithelioma papillosum multiplex" of Jarisch[16]), while, occasionally, tracts of cylindrical epithelium were found running in all directions through the fibrous stroma. These chains were quite long, sometimes branched, and usually not more than two or three cells in width, presenting somewhat the appearance of coil gland ducts. Only a few of them terminated in cysts, and no connection could be traced between them and either the sweat apparatus or the blood-vessels.

It is very probable that this growth, which clinically did not resemble any hitherto reported, was simply a mixed tumor, and that the two types of epithelial structures composing it were in no wise related. The most important evidence in support of the sweat-gland theory of histogenesis of these tumors is the resemblance between the epithelial strands, nests and cysts, and the

Fig. 4.—Syringocystadenoma, showing flattened epithelial lining of cysts, some of which contain hyaline bodies. (Spencer ¼ obj. No ocular.) Case 2.

tubules of normal coil-glands. There is a manifest similarity between the narrow, often wavy or twisting strands of epithelium connected with the cysts and the normal tubules of coil-glands, but most significant and convincing is the presence in many of the cysts and tubular strands of the double row of epithelial cells, the outer row flat and the inner row cubical, precisely the arrangement so characteristic of the cellular lining of the sudoriparous tubules. While this arrangement is not in all places apparent in consequence of pressure of the contents of the cyst, proliferation of cells, and other obvious causes, it can be recognized in so many places that it cannot be doubted that it is a characteristic histologic feature of this class of tumors.

The decision of the question as to whether the tumor springs from previously normal sweat-ducts or from congenital or acquired defects of the sweat-glands is more problematic. Considerable weight is to be given Török's[21] argument, who made the first thorough study of the histogenesis of lymphangioma tuberosum multiplex, that the absence or rare occurrence of sweat-glands in the area of the tumor, in contrast to the presence of

13. Dohi: Arch. f. Dermat. u. Syph., 1907, p. 63.
14. Stockmann: Arch. f. Dermat. u. Syph., 1908, p. 145.
15. White, C. J.: Jour. Cutan. Dis., 1894, p. 477.
16. Jarisch: Arch. f. Dermat. u. Syph., 1894, p. 164.
17. Stelwagon: Diseases of the Skin, W. B. Saunders Co., Phila., 1910, p. 634.
18. Möller: Arch. f. Dermat. u. Syph., 1902, p. 55.
19. Blaschko: Verhandl. d. Berl. dermat. Gesellsch., July 5, 1908.
Neumann: Arch. f. Dermat. u. Syph., 1900, p. 3.
Joseph and van Deventer: Dermato-histologischer Atlas der Hautkrankheiten, Berlin, 1906.
Flocel: Gior. Ital. d. mal. ven., 1904, p. 3.
Winkler: Arch. f. Dermat. u. Syph., 1907, p. 129.
Dohi: Arch. f. Dermat. u. Syph., 1907, p. 63.
Stockmann: Arch. f. Dermat. u. Syph., 1908, p. 145.
20. Hartzell: Brit. Jour. Dermat., 1904, p. 361.
21. Török: Monatschr. f. prakt. Dermat., 1892, p. 182

these appendages in the normal skin, is indicative of the transformation of preexisting sweat tubules into tumor elements. The findings in the case here reported tend to confirm this theory, and the fact that epithelial strands, similar to those found in the tumor areas, may and do occur in apparently normal regions is additional evidence in support of this hypothesis.

In favor of the congenital theory is the occurrence in so many instances of the affection in early life, and especially its occurrence in several members of the same family. Schidachi[22] has produced similar cysts, even with epithelial strands, by occluding the sweat-ducts, and Unna[23] describes a budding epithelial process in spiroadenomata occurring in the neighborhood of varices of the leg apparently similar to the proliferative changes seen in some cases of lymphangioma tuberosum multiplex. Pick[24] objects to regarding these growths as true

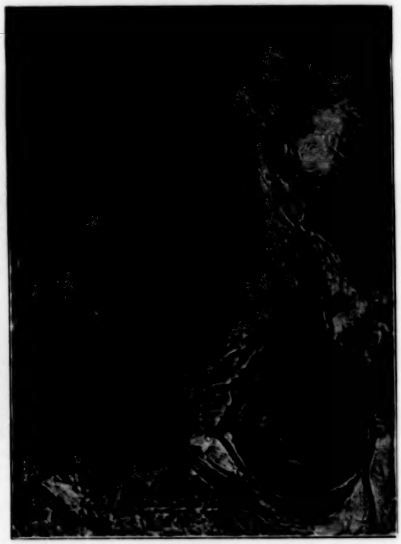

Fig. 5.—Syringocystadenoma, showing epithelial strand apparently developing from the covering of a sebaceous gland. Serial sections showed that there was no connection between the two substances. (Spencer 1/6 obj. No ocular.) Case 2.

adenomata, the question being whether there is anything in the nature of a true secretion. If the hyaline or colloid material in the cysts is merely the result of cellular degeneration the propriety of such names as cystoma and cystadenoma would be questionable, but Stockmann[14] has apparently shown that, in some instances, the cysts and tubules contain genuine secretion, and the fact that some of the tumors in our case increased in size following the administration of pilocarpin would tend to confirm Stockmann's findings. Strictly speaking, these growths are benign cystic epitheliomata, although that name had best be reserved for the Brooke-Fordyce type of neoplasm, and a more appropriate and descriptive one adopted for tumors of this group. The designation "syringocystadenoma," suggested by Török, appears to us to be very appropriate, being expressive and at the same time concise.

The extremely interesting and very extraordinary example of sweat-gland tumor recently reported by Ormsby,[25] is exceedingly difficult to classify properly. So far as we can find, no similar case has ever before been described. Engman's[26] suggestion that the sudden and widespread multiplication of certain types of cells might be due to a specific chemical agent acting as a stimulant, as claimed by Starling in formulating his now generally accepted hormone theory, is of great interest, even though Webster's[27] careful and exhaustive analyses proved fruitless in this instance.

CONCLUSIONS

Lymphangioma tuberosum multiplex or, better, syringocystadenoma, is a non-malignant, cystic neoplasm derived from misplaced embryonal coil-gland elements. The cells still retain their sweat-secreting function, hence the tumors are true adenomata.

Although these growths are, in reality, benign cystic epitheliomata, they distinctly differ, both clinically and microscopically, from the acanthoma adenoides cysticum originally described by Brooke and by Fordyce. If the term "multiple benign cystic epithelioma" is to be retained, its use should be confined strictly to tumors of the Brooke-Fordyce group, and a more fitting and proper designation, as syringocystadenoma, adopted for the neoplasms which have so long been indexed under the euphonious but misleading appellation of "lymphangioma tuberosum multiplex."

We desire to express our very great indebtedness to Professor William H. Welch, of Johns Hopkins University, for his opinion regarding the syringocystadenoma sections. Much of the included summary is quoted almost directly from his personal communication to us, and we feel that his knowledge and discussion have gone far toward clearing up the puzzling subject in question.

22. Schidachi: Arch. f. Dermat. u. Syph., 1907, p. 3.
23. Unna: Histopathology of the Diseases of the Skin, p. 807.
24. Pick: Virchow's Arch. f. path. Anat., 1904, p. 312.
25. Ormsby: Jour. Cutan. Dis., 1910, p. 433.
26. Engman: Jour. Cutan. Dis., 1910, p. 444.
27. Webster: Jour. Cutan. Dis., 1910, p. 441.

TREATMENT OF NON-UNION OF FRACTURES *

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A fracture which has been apparently properly reduced and treated according to the orthodox manner is supposed to go on to successful healing. Fortunately, this is usually the case. Occasionally, however, without any apparent cause, union fails to occur, and such an outcome is both distressing to the patient and embarrassing to the surgeon. Theoretically, bone should repair perfectly, as it belongs to the connective tissue group of tissues that are simple in construction and consequently easy of repair. We know that simple tissues repair readily, whereas the more complicated tissues, such as brain and epithelial and glandular structures, either do not repair at all, or else very imperfectly after a prolonged time. This is a simple, common-sense, biologic law that we would naturally expect. The exception in the case of bone is more apparent than real. The general connective tissue frame-work of the bone is built up even where no union occurs. The fault lies in the failure of the tissues to deposit lime salts, as the mineral

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matter in bone comes from the deposit of lime salts that are ordinarily maintained in solution in the blood. Just why this deposit sometimes fails is not always easy to explain. Of course, mechanical conditions, such as the imperfect reduction of the fracture, or the interposition of fascia or muscle must be excluded before the causes of true non-union are considered. Several constitutional diseases, syphilis in particular, are supposed to produce a condition in the blood that prevents, or, at least, retards the deposition of lime salts; but after excluding all local and constitutional diseases there still remains quite a group of cases in which, after proper reduction of a fracture and with absolutely no history whatever of constitutional trouble, the bone refuses to unite. This failure to precipitate lime salts is probably due to some idiosyncrasy that may exist in a patient who is otherwise normal and healthy, and apparently it may exist with a normal tendency to repair in every other respect.

The problem that confronts us in the treatment of true non-union of bone, that is, cases in which lime salts are not properly thrown down, resolves itself into two indications. The first is to increase the quantity of lime salts contained in the blood; and the second, to induce a larger quantity of blood to flow through the affected bone. In practically all of these cases there is some very slight tendency toward the deposit of lime salts, though it may be so slight as to require a microscopic examination to demonstrate it. If we can induce a larger quantity of blood to flow to the injured part, not only shall we furnish a greater volume of blood within a given time from which lime salts may be taken, but also the nutrition supplied to the local bone-cells may so stimulate them as to increase their activity in causing the deposit of lime salts.

The first indication is met by the administration of calcium salts, usually in the form of hypophosphites. Thyroid extract has been recommended, though its method of action is uncertain and reports on its efficacy are conflicting. The thyroid gland is supposed to exert some influence on the growth of long bones. The extract may act as a hormone. The diet and personal hygiene of the patient generally should, of course, be carefully regulated.

The second indication, that of increasing the blood-supply to the site of fracture, must be carried out by local measures. We know that any foreign substance embedded in tissue induces a hyperemia. If infection occurs, this hyperemia is diverted to fighting the invading germs, and cannot be used toward building up the tissue. If, then, we insert a sterile foreign body that can be gradually absorbed, we have the ideal condition of bringing more blood to the region in which this foreign body is inserted, and, at the same time, attracting leukocytes for its absorption, and so accomplishing the gradual disappearance of the foreign body after union of the bone has occurred. Along this line Dr. Charles Mayo makes a practice of putting a sterile ivory pin in the medulla of the bone in cases of ununited fracture. This pin does not fit tightly, and is not intended to hold the bone in position, but to stimulate hyperemia and local leukocytosis. The idea was suggested to Dr. Mayo by the fact that a sequestrum causes a marked formation of new bone around it. Blood-clots also act in somewhat the same manner. The fragments should be set in the proper axis, but, instead of being smoothly sawed, the ends should be roughened and a little jagged so that blood-clots may accumulate in between the ends, and so increase hyperemia and leukocytosis for the absorption of these clots. Too often we lose sight of the scientific principles involved and become mere mechanics to make a neat joint, leaving little inducement for hyperemia, and so defeat the very object of the operation. Smoothly sawed bone and accurate approximation is proper in cases of ordinary fracture, where an abundance of lime salts will be thrown down after any operation, but in non-union such procedures will often fail.

Another measure that is useful in conjunction with those already mentioned is Bier's hyperemia. This may be effected by a rubber band placed around the limb, some distance above the fracture, and made sufficiently tight partially to obstruct the venous circulation. It is left on from twenty to forty minutes every day. This acts by damming back the blood and so dilating the capillaries and when the tourniquet is removed an arterial hyperemia follows the venous. It is the arterial hyperemia that is chiefly beneficial.

A very important factor in the treatment of non-union of fractures is the amount of bone to be nourished. Frequently in these cases the ends of the bone are filled with a solid mass of bone-tissue. This not only blocks off the nutrition that normally would come from the medulla and endosteum, but imposes a greater burden,

Fig. 1.—Section of bone removed from the femur about the junction of the middle and upper thirds. The medullary cavity is completely filled with bone. See case report.

Fig. 2.—The other side of the bone represented in Figure 1. The section was about one-half inch long. In the center of this side of the section is seen a trace of the medullary cavity.

by filling up the medullary cavity with bone and giving a solid column to be nourished instead of a hollow cylinder. It is a well-known principle of mechanics that, weight for weight, a cylinder has greater strength than a solid column. The bone fills up the medulla and will not only block off the nutrition from this source, but will take unto itself much of the nourishment that should go toward the cortex. It is important, then, to drill out the ends of the bone thoroughly until the medullary cavity has been reached. This is best done by means of a burr, and a small chisel may be used gently to enlarge the opening. The difficulty in obtaining nutrition for a solid column of bone is well illustrated by the following case:

Patient.—A young man, a medical student, without any history of syphilis or tuberculosis, had been having for four or five years considerable trouble with his left femur. Abscesses would form which when opened would lead down to the femur. A small amount of bone would be removed and the wound would heal slowly. He had undergone a number of operations at the hands of various surgeons.

Operation and Course.—Finally, an osteitis developed, for which he consulted me and which was treated by incision and

curetting. The wound did not heal, and he was operated on again and the curetting done more thoroughly; carious bone was also removed with a chisel. Instead of improving, however, the patient grew worse. There was apparently no effort on the part of the bone to heal, and the patient developed symptoms of sepsis. In order to save his life, the leg was amputated at the junction of the middle and upper thirds of the femur. The bone was perfectly solid. A fragment cut from the lower end showed only a small trace of the medullary cavity on one side and was absolutely solid on the other. (Figs. 1 and 2.) In this patient we had to deal with a femur that was a solid column and not only deprived of the nutrition which would normally come from the endosteum and the medullary cavity, but had the additional tax of having this space filled with bone that also required nutrition. The supply was just enough to nourish the bone under normal conditions, but when injury occurred and there was a call for extra blood for the process of repair, it could not be furnished as the femur was already taxed to its limit to maintain its physiologic nutrition. Any defect in such cases necessarily cannot be repaired.

The matter of fixation of the fracture in cases of non-union is probably the least important part of the treatment. If the principles of personal hygiene are observed and there is no constitutional trouble, and particularly if the local indications, such as cleaning out thoroughly the ends of the bone to the medullary cavity, placing inside the medullary cavity an ivory pin, and roughening the ends of the bone so as to leave space for small blood-clots—if these principles are carried out, it matters little what method of fixation is used, so the limb is put up in its proper axis. I use a silver plate, fastened by one or two screws in each end of the fracture. This is supposed to be less irritating to the tissues than the iron plate, and can be cut to suit the case at the time of operation. In addition, while it is stout enough to withstand ordinary strain, if any great strain is placed on it, instead of snapping or pulling out at the screws, as would be the case in an iron plate, it will usually bend. The plate is best placed on the periosteum, or if the periosteum has been denuded, it should be sutured around the plate. The wound is closed without drainage, and a plaster-of-Paris cast or some other splint should be applied. The limb should be kept in a retentive apparatus for several months, though, of course, this should be changed every few weeks. After three or four weeks, it is best to begin the use of the limb. If it is a fractured leg, walking with crutches, having the leg heavily encased in plaster of Paris, should be encouraged, a little more weight being borne on the leg each day.

421 West Grace Street.

THE DECORATION OF THE INTERIOR OF HOSPITALS AND PUBLIC BUILDINGS

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The decoration of the interior of hospitals should receive the earnest consideration of the physicians in charge, as the greater sanitary conditions which obtain from the application of thoroughly hygienic coatings are of vital importance in such establishments. I have made a careful study of the characteristics of various paints, and shall endeavor, in this article, to point out the defects and merits of different types of wall-coatings.

EFFECT ON HEALTH OF VARIOUS FINISHES

People who are confined for any considerable period of time in hospitals, office buildings or other structures, the walls of which are covered with unsanitary coatings, are subjected to an atmosphere which may be both disagreeable and poisonous. That the air may carry in suspension minute particles of matter that often have a serious effect on delicate tissue is shown by the effect of the pollen of plants which is frequently the cause of coryza and hay fever, and again by the unsanitary effects of the Paris-green coloring matter that was at one time largely used in the printing of designs on wall-paper. It would seem imperative, therefore, to provide within public buildings a non-poisonous and thoroughly inert type of wall-coating so as to have present at all times the most highly sanitary conditions.

Necessity of Paint.—The walls and ceilings of hospitals, which are generally finished in plaster to a hard surface, should never be papered, as the absorbent surface presented by paper, together with the paste binder used in its application, furnishes not only a resting place for germ-laden dust, but also a culture medium for the development of bacteria (see A in illustration). It is therefore advisable to select a suitable paint for the decoration of the walls.

Water Paints Dangerous.—Cold-water paints for the decoration of walls are not only unsanitary, but as a rule possess little durability. Like wall-paper, they cannot be washed down with water or antiseptic solutions, and even after short service are liable to scale and present a bad appearance. Cold-water paints have as binding material, glue, casein, dextrin and other products which serve as nutrient media for fungi and molds which develop musty, foul odors suggestive of decomposition. It is well known that meats, beverages and other sensitive foodstuffs placed in rooms decorated with cold-water paints are liable to absorb odors that ruin their taste. There have recently appeared on the market paste-paints which contain a rosin varnish binder, mixed with glue, dextrin and other water-soluble materials of an adhesive nature (see B in illustration). The instructions for the application of these paints call for reduction with water rather than oil or turpentine. Paints of this type are even more dangerous to use than ordinary calcimine. Cold-water paints, therefore, should be avoided under conditions in which highly sanitary results are desired.

Newer Materials.—The once prevalent method of washing the oil from white lead with turpentine, and applying it as a flat paint, should no longer be practiced. Recent progress in paint technology has brought about new and interesting developments in the production of oil-mixed paints which are better suited to meet most conditions in modern building construction.

REQUIREMENTS OF A WALL-PAINT

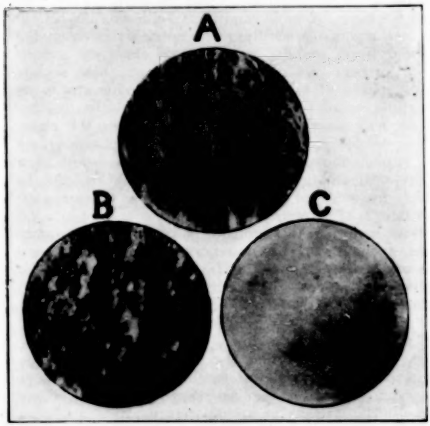
In order that a paint may be thoroughly suitable for the protection and decoration of hospital walls, it must be of such a nature as to form on drying a hard, elastic and impervious surface that may be washed with water or antiseptic solutions, or subjected to the fumes of formaldehyd and sulphur dioxid. The pigments in such paints must be of a permanent type, unfading, non-darkening and unaffected, even when tinted to the most delicate hue, by the caustic lime that may exist in cement and plastered walls.

Flat Finishes.—In public and private wards where the patients' eyes must find restful surroundings, the

modern sanitary flat wall-finishes, fulfilling, as they do, the above requirements, are preferable on account of the non-reflective mat surface which they present. These flat wall-finishes as they appear on the market are made of lithopone, zinc oxid, sublimed white lead, barytes, silica, and other non-poisonous pigments ground in a treated oil which dries to a flat, waterproof and washable surface.

Enamels.—For the decoration of operating-rooms and for the general trim of a hospital, satin or gloss finish enamels are to be recommended. The highest grade enamels produced are those made from American zinc oxid ground in a pale, hard-drying varnish and thinned with a light, lustrous varnish of the dammar type (see C in illustration). The hard, ultra-white surface produced by such enamels is not only highly sanitary, but very durable.

When hospital authorities have had such paints applied, they may rest assured not only that lasting and durable results will be obtained, but also that they are



Microscopic views of walls. A, wall-paper, showing fibers; B, surface painted with water paint, showing disintegrated surface, and C, surface painted with sanitary paint.

securing the most hygienic coatings yet devised. The painter, however, should bear in mind that sufficient time must be allowed for each coat to dry firm and hard, before the application of subsequent coats. The initial set of a paint, in which only the tackiness has disappeared, is but a part of the drying process which requires considerably more time before subsequent coats should be applied.

Painting Cement.—With the introduction of cement for the construction of hospital floors, problems have arisen in decoration, which have been successfully solved by the paint technologist. The surface wearing of cement floors, with the consequent dusting, makes necessary the application of properly designed cement coatings. These should be made largely of hard, abrasion-resisting pigments ground in an oil that will not saponify when placed in contact with the alkali-bearing cement, and still be of such a nature as to produce a hard, glossy surface that may be flushed with water or dilute antiseptic solutions at any time.

A PROSTATOMETER

AN INSTRUMENT DEVISED FOR ESTIMATING THE SIZE OF AN ENLARGED PROSTATE *

HENRY J. SCHERCK, B.S., M.D.
ST. LOUIS

This instrument, which I devised for the measurement of the prostate, is based on the principle of ordinary calipers used by workmen, adapting it to the immediate needs of the object to be obtained in prostate examination. It consists of two arms, the rectal arm *B* and the vesical arm *A* (Fig. 1).

The rectal arm is long enough and so curved that it may be introduced readily into the rectum. The tip of this arm ends in a small knob in order to make gentle pressure over the rectal projection. The curve of this arm is sufficiently ample to take an oblique measurement. The distal or external end, marked *C* (Fig. 1), ends in a movable joint which is held together with a thumb-screw to a short arm to which the bladder arm is attached by means of two smooth pivots.

The vesical arm consists of a flexible metal sound for about two-thirds of its length. The flexible portion allows itself to be bent with some manipulation and is equal in size to a No. 20 French sound. The object in

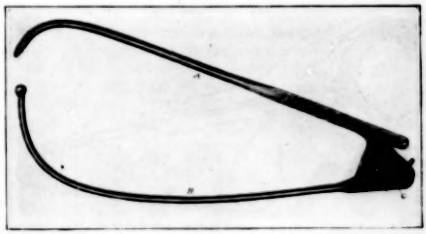


Fig. 1.—Prostatometer, an instrument devised for the measurement of the prostate.

making this of flexible metal is to make it available in cases in which it is found necessary to adapt it to the shape of the tumor. The extravesical or lower third is made of rigid metal perforated by holes, nine in number, at equal distance from each other in which to lock the pivots on the short arm connected with the rectal arm and either increase or diminish the length of the sound as the operation requires (Fig. 1, *A*).

METHOD OF APPLICATION

The patient is placed in a recumbent position and brought to the edge of the examining-table. The lower limbs are supported by leg-rests or stirrups. The bladder is then irrigated and distended comfortably with boric acid solution. The tip of the flexible bladder arm is now bent to conform with the probable shape of the urethra or vesical tumor, giving the tip as much curve as is found possible. After the sound has gained access into the bladder, the instrument is reversed, its beak made to point downward and gradually moved backward and forward until it reaches the highest point of the intravesical projection (Fig. 2, *A*). When this is accomplished an assistant holds it firmly in the position obtained.

* From the Department of Genito-Urinary Surgery, St. Louis University School of Medicine.

The rectal arm is now introduced into the rectum with the index finger of the examining hand, and the knob on its extremity held against the most prominent portion of the rectal tumor (Fig. 2, *B*), making slight pressure in order to overcome the thickness of the rectum. The short arm is now moved to a point which allows it to be easily locked with the bladder arm, this is done by simply fitting the two pivots into the convenient holes in the bladder arm, at the same time taking note of the number of each hole.

Finally, the operation is completed by firmly locking the two arms by means of a thumb-screw (Fig. 2, *C*). The bladder arm is then unlocked, this portion of the instrument reversed and withdrawn. The rectal arm is removed and the bladder arm is again locked over the pivots of the short arm and the distance between the extremities of both arms accurately measured.

The position in which the extremity of both arms are held enables one to estimate either the anterior-posterior measurement or the oblique measurement. If it is desired to take a measurement from the floor of the prostatic urethra to the point of the greatest projection into the rectum, the tip of the flexible sound is bent perfectly straight.

In addition, the bladder arm can be used to determine the presence of stone, as well as to gain whatever

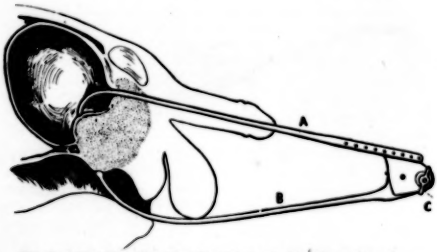


Fig. 2.—Prostatometer introduced into the bladder and rectum.

information is obtainable from the method of the introduction of a sound in the bladder with the fingers in the rectum, before locking it to the short arm of the rectal arm.

Several colleagues to whom this instrument has been shown have suggested its application in other conditions—notably, to differentiate a dilated or distended bladder from a prevesical tumor. In such a case the rectal arm would rest against the anterior abdominal wall.

309 Century Building.

Combined Roentgen-Ray and Daylight Glasses for Extraction of Foreign Bodies.—The November *Bulletin de la Société de Radiologie de Paris* contains an account of a combined fluoroscope devised by L. R. Deslongchamps. One eye looks into a dark chamber closed below by a fluorescent screen for observing the shadows cast by the Roentgen rays, while there is nothing to obstruct the vision of the other eye. By using each eye in turn, the operator is thus able to inspect the region with the Roentgen rays or daylight, and the inventor says that the eyes soon accustom themselves to the task. He claims that his radioscope is particularly useful for extraction of small foreign bodies, especially needles in the feet or hands, and for reduction of fractures and dislocations. His efforts to make a radioscope in which both eyes could be used simultaneously in turn for the Roentgen rays or daylight were not successful.

MAGNIFIED HEART SOUNDS DUE TO EXTRACARDIAC CONDITIONS

WITH REPORT OF AN UNUSUAL CASE

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It is a well-known fact, frequently mentioned in the literature, that a gas-containing cavity in proximity to the heart may act as a resonating chamber and greatly increase the intensity of the heart sounds as heard on auscultation or even render them audible at a short distance from the chest. The conditions producing such cavities are (1) pneumothorax, (2) pulmonary vomicæ, (3) tympanites, (4) gastric dilatation. The former two require to be properly placed with relation to the heart in order to act in this way. Air or gas may increase the loudness of the heart sounds in two additional conditions, differing mechanically from the preceding; that is to say, in pneumopericardium and in subcutaneous emphysema. These obviously do not present the same favorable conditions for resonating action. In fact, pneumopericardium does not truly intensify the normal heart sounds, but produces abnormal sounds quite pathognomonic of the condition; these sounds being spoken of as the water-wheel murmur due to its churning, splashing character and the metallic tinkling which may be audible at a distance from the chest. These sounds are similar in character and etiology to the succussion splash and metallic tinkle heard in a hydropneumothorax. An article by James,[1] in 1904, in which he analyzed thirty-eight cases of pneumopericardium, is of extreme interest.

With regard to the influence of subcutaneous emphysema, an interesting case is reported by Keats,[2] in which the emphysema followed a fracture of the third and fourth ribs on the right side near the sternum, and extended over the whole precardiac area except toward the apex. At the apex the cardiac sounds were normal, but over the emphysematous area the sounds were very loud. Keats proved that the increase was due to the emphysema by reducing the emphysema by pressure and observing a return of the heart sounds to normal. This is a clinical curiosity of no importance.

Still another condition which may increase the intensity of heart sounds to such a great degree as to render them audible to an observer at a short distance from the chest is described by Bramwell.[3] In the case he reports there was consolidation of the lower two-thirds of the left lung and "the heart sounds could be readily heard, when the patient sat up, without applying the ear to the chest."

The mechanical principles of the gas-containing cavities which may intensify the heart are the same in each and the rule applies that the cavity does not have to be interposed between the heart and the ear to act as a resonator.

1. Pneumothorax quite commonly acts in this manner, and a number of cases have been reported—seven in one paper by Galliard.[4] It is usually thought that only left-sided pneumothorax can act in this manner, but Beau[5] reports a right-sided pneumothorax which exaggerated the sound of a pericardial friction to such an extent as to make it audible at the distance of a

1. James, W. R.: Am. Med., July 2, 1904, p. 23.
2. Keats, W. C. J.: Lancet, London, 1904, i, 1721.
3. Bramwell: Diseases of the Heart, p. 156.
4. Galliard: Traité de médecine et de thérapeutique, viii, 219.
5. Beau: Traité d'auscultation, Paris, 1856, p. 192.

meter. This case occurred in a man following a knife-thrust which opened the right pleura and wounded the pericardium with resulting hydropneumothorax and pericarditis.

2. Pulmonary cavities very commonly give a metallic timbre to the heart sounds, but very rarely cause much increase in intensity. A case in which the cavity was in the left lung in the mammary region and caused some increase and a distinct amphorometallic quality to the heart sounds is reported by Sabourin.[6]

3 and 4. Tympanites can well be considered with gastric dilatation, since the two conditions act similarly and often synchronously. The close relationship between the apex of the heart and the stomach makes it certain that in the presence of a dilatation of the stomach the large air-containing cavity would influence the heart sounds, and especially is this true if there is a coincident hypertrophy of the heart. Of more importance than the added intensity or amphorometallic timbre of the heart sounds is another phenomenon very rarely seen, which occurs in such cases. This consists of an abnormal sound, cardiac in rhythm and systolic in time, due to the transmission of the cardiac impulse against a dilated stomach containing some fluid. This phenomenon was markedly present in the case I wish briefly to mention here. A complete history of the case is later appended. The patient, a boy of 14, had suffered with endocarditis for several years resulting in a greatly hypertrophied heart, with badly damaged mitral and aortic valves. When I first saw him his condition was very serious, there being distinct loss of compensation, with dyspnea and edema. After a few days of moderate cardiac stimulation and careful hygiene his condition had slightly improved. I will quote my office note on the sixth day after first seeing the patient:

> June 12. To-day for the first time I was able to observe what patient and mother have described to me as occurring frequently. Their description was that at times there was a sound, audible through the room, beating with his heart and sounding like a splash, coming and going. Following their description to me I had carefully considered a hydropneumothorax or hydropneumopericardium, but there was no evidence of either. To-day I was present during the sound's occurrence. The patient was lying a trifle lower than before and was perfectly comfortable (smilingly saying: "It is going on now"). As I stood on the opposite side of the room about 10 feet distant I could plainly hear a sound synchronous with the pulsation I could see in his neck. The sound was a mixture of tympanic note with a slight splashing element. I uncovered the patient and the sound increased in intensity, with its maximum point near the apex. In time it was systolic, short and sharp. The action and sounds of the heart were just as on the previous visit. On auscultation the sound was very loud and tympanitic and was readily traced to the gastric region, all over which it could be heard clearly. The sound can best be reproduced by percussing very forcibly a dilated stomach half full of fluid. In effect it was this that the heart was doing. On pressure just below the left costal margin the sound ceased and the impulse of the heart's apex could be felt against the finger-tips. The boy had eaten and drunk within a few minutes before my arrival. The sound continued throughout my entire visit and examination.

The patient was transferred to the University Hospital for observation, but this phenomenon was never markedly present again, owing in all probability to improved dietary. Death occurred very suddenly a month later and no autopsy was permitted. The very meager results of a search through the literature for descriptions of such cases led me to make this report. In 1907, Spillman and Perrin[7] state that although they know cases showing this phenomenon had been observed, they are unable to find any such mentioned in the literature. The case they report is very similar to mine. It occurred in a girl, aged 22, whose heart was hypertrophied as a result of an aortic insufficiency. The heart sounds and murmurs were so greatly intensified by a dilated stomach that they could be distinguished with the ear several centimeters from the chest. In addition there was present after the ingestion of liquid a systolic *clapotis rhythmé*, loud enough to be audible to one at the bedside and at night disturbing the patient's sleep. This was increased by recumbency. The authors consider it due to the shock of the heart, aided perhaps by the abdominal aorta.

In a case reported by Sabourin[6] the author states that the heart sounds were so accentuated by a dilated stomach that they could be heard a yard away from the chest and had an amphorometallic tone which he compares to the sound produced by striking with a padded drum-stick the inside of a metal jar. It is probable that he confuses the heart-sounds with the phenomenon described above. In his case treatment directed toward relief of the gastric condition soon restored conditions to normal.

The assertion has often been made—first I believe by Laennec,[8] in 1826—that at times the normal heart sounds could be heard at a short distance from the chest with the unaided ear in the absence of any gas-containing cavity to act as a resonator. This has also been denied in the case of normal sounds, although it is admitted that the systolic impact of the normal heart against the thoracic parietes may be audible at a short distance.

Three interesting cases of traumatic nature were reported by Guido Bell,[9] in 1891, in an article entitled, "A Peculiar Noise of the Heart Heard at a Distance and Claimed to be Due to Shock." Although the author's interpretation of the phenomenon as a pathognomonic symptom of the condition of shock appears questionable, yet the description of the cases leaves no doubt as to the existing conditions. All three cases are similar. In each a severe trauma was followed by shock, as one symptom of which a tympanites or gastric dilatation developed against which the dilated heart was slapping. The author describes the peculiar noise as systolic in time and of a loud smacking character, audible at a distance of two yards.

The preceding five cases are the only ones to which I have been able to find reference in a brief review of the literature, although an occasional author makes passing mention of the condition. The case that I was fortunate enough to observe seemed worthy of being reported on account of this rarity of the phenomenon, and also on account of the clear etiology of the sound in this case and its extreme loudness. A complete history of the case is here detailed.

REPORT OF CASE

History.—L. R., a boy aged 14, gave as his chief complaint, dyspnea, palpitation and pain in his right shoulder. The present condition was first noticed about two years previously when his mother observed that he was rather weak and looked ill. He commenced to complain of pain in both ankles, knees and right shoulder, and at times had some edema of his

6. Sabourin, C.: Rev. gén. de clin. et de thérap., 1910, xxiv, 264.

7. Spillmann and Perrin: Province Méd., xx, No. 34, p. 429.
8. Laennec: Auscultation médiate, 1826, ii, 453.
9. Bell, Guido: Lancet-Clinic, Sept. 19, 1891.

ankles. He continued, however, to attend school and be active until about six months before coming under observation, when a more severe attack of rheumatic pain, with great weakness, caused him to go to bed. After two weeks' rest he improved but did not return to normal. About five months later he became very dyspeptic and edematous and remained in bed from that time. The dyspnea was so severe that he required to be propped up and his weakness was intense. His previous medical history was of considerable interest. He had had measles and whooping-cough in childhood. At 6 years of age a doubtful attack of meningitis was followed by chorea. At the age of 9 he suffered a severe attack of acute articular rheumatism which affected his ankles, knees and shoulders. His family history was of no importance and the social history was that of an active school boy.

Physical Examination.—The patient was an underdeveloped boy with a slight frame, poor musculature and little panniculus adiposis. He was markedly anemic. There was no general adenopathy and no osseous deformity. The skin was cool and moist, showing no eruption. There was marked edema of the ankles. The ocular movements were free in all directions; pupils reacted normally to light and in accommodation. The conjunctivæ as well as all visible mucous membranes were very pale but showed no signs of jaundice. The tongue was coated, the throat normal, and the teeth in good condition. There was distinct pulsation of the veins and arteries in the neck, but the veins were not very prominent. A blowing, systolic murmur was audible over the carotids. The thorax was narrow and thin-walled, with prominent ribs and clavicles. The superficial veins were conspicuous. The precordia bulged somewhat and seemed to pulsate with each beat of the heart. Expansion was poor, being greater on the left than on the right. The lungs were resonant throughout and the breath-sounds were puerile, especially at the apices. A few râles were heard at the bases. The boundaries of the heart were the second rib above, the sixth interspace in the anterior axillary line to the left, while the right border extended 3.5 cm. to the right of the sternum. On auscultation double mitral and double aortic murmurs were heard, the muscular elements being very weak. There was no pericardial friction. The liver extended from the fourth rib to 2.5 cm. below the costal margin. The abdomen was distended, the walls weak and thin. Splenic dulness was normal and the organ was not palpable. The extremities, save for the edema, were normal. The radial pulses were synchronous and equal, but very weak and irregular, only every other heart-beat being transmitted at the wrist.

Laboratory Examinations.—Blood: Hemoglobin 58 per cent.; white blood-cells, 12,100. Urine: amber, light flocculent precipitate; Sp. gr. 1,025; acid; albumin, a faint trace; sugar, negative. Sediment showed hyaline and many dark granular casts, many cylindroids, much mucus.

The patient was under observation for six weeks and seemed to respond slowly to treatment, although he continued to run a hectic temperature and a rapid pulse. No blood-culture was taken. The daily notes on the case are of no special interest except the one already quoted. Death occurred suddenly and no autopsy was obtained.

1811 Spruce Street.

MENSTRUAL SUPPRESSION DUE TO HYPOTHYROIDISM

CATHARINE MACFARLANE, M.D.
GERMANTOWN, PA.

Mrs. F., aged 25, came to my clinic at the Woman's Hospital Jan. 28, 1911, complaining of amenorrhea of eight months' duration.

History.—Menstruation had been established at 13 and had always been regular, profuse and painless, the periods lasting four or five days. The patient married at 18 and three years later became pregnant, but miscarried at four months, cause unknown; a second early miscarriage followed a fall. After the miscarriages she continued to menstruate regularly until 1910, when she missed her periods in March and April; a normal period occurred in May, 1910, after which there was no return. During these eight months of amenorrhea, she suffered from almost constant headache, backache and nausea, numbness of the hands and arms and vertigo; she complained of feeling stupid and sleepy; she put on flesh steadily, finally weighing 230 pounds, and her abdomen was noticeably increased in size.

Examination.—The patient was 5 feet 6 inches tall and appeared large and clumsy; her face was bloated, eyelids puffy, eyes heavy, lips thick and complexion pasty; her skin was dry and rough, the flesh swollen, firm and inelastic; her mental state was dull and listless. Pelvic examination revealed normal organs with no signs of pregnancy; the abdominal enlargement was evidently due to accumulated fat; systolic blood-pressure registered 120 and the red cells numbered over six million.

Treatment.—The whole aspect of the patient was so striking and so like myxedema that, in view of the negative blood and pelvic findings, the possibility of the amenorrhea being due to deficient thyroid secretion at once suggested itself and she was accordingly directed to take 5-grain tablets of the dried thyroid gland three times a day.

March 25, 1911, after eight weeks' treatment, the patient menstruated for the first time in ten months; the flow was dark in color and moderate in amount, lasting five days; the headache, backache and numbness were all relieved. From this time on the patient menstruated regularly every four weeks, with the exception of May, 1911, and her symptoms gradually disappeared. Nov. 22, 1911, she weighed 216 pounds, her features were clearly defined and her expression and conversation, when compared with last January, seemed animated.

5808 Greene Street.

A SPORADIC CASE OF INFECTIOUS HEMOGLOBINURIA *

W. G. LITTLE, M.D.
OKMULGEE, OKLA.

Definition.—An infectious disease of the new-born, occurring during the first two weeks of life, and of an epidemic nature.

Historical Data.—This disease seems to have been described first by Charrin, of Paris, in 1873, with a report of fourteen cases. In 1879 Winckel, of Dresden, reported twenty-three cases in the Foundling's Hospital, and described the disease in detail, from which time it has been known as "Winckel's disease."

Etiology.—In regard to the etiology, little of certainty is known, but the disease is generally conceded to be of an infectious origin, and occurs in epidemic form in institutions. The nature of the infection is unknown, but Garrod, of London, included it under diseases of the kidney, and states that it is probably due to bacterial toxins. It is not due to infection of the umbilical cord.

Pathology.—There is a yellow staining of the skin and internal organs. The spleen is large, hard and darkened, and filled with blood-pigment, which is diffused throughout the pulp and free in the blood-vessels. The kidneys are dark brown in color, the tubules being filled with granular pigment, which shows under the microscope to be crystals of hemoglobin, and small hemorrhages show in their substance. The liver and heart are sometimes found to be fatty. The umbilical vessels show no sepsis. The urine is brown, albuminous and contains methemoglobin and deposits a sediment com-

* Read before the Okmulgee County Medical Society, September, 1911.

posed of epithelium and tube-casts. The blood shows an increase in leukocytes and many free granules.

Symptoms.—These are intense and fulminating in character, seldom lasting longer than two days, often only one. The early symptoms are restlessness, rapid pulse and respiration, prostration, cyanosis and general icterus, the skin having an intense bronze hue. There may be a slight fever, up to 101 F., or the temperature may remain normal. The respiration is labored and more or less rapid. The urine may be passed frequently and imparts a dark bronze or copper color to the napkin. Gastro-enteric symptoms may occur. There is rapid asthenia and a termination often in coma or convulsions.

Treatment.—This disease is practically always fatal, and the treatment is to be directed against the individual symptoms as they arrive.

CASE REPORT

Baby C. born May 20, 1911, at 7 p. m., a well-developed girl baby. The mother was a strong young woman, very well, having worked up to the time the labor pains began, and had given birth to the child before I reached the home. I tied the cord and delivered the placenta. The conditions were all right until May 23, when about 9 a. m. a neighbor woman telephoned that the baby was yellow and asked whether it would be all right to bathe her and give her some oil. To this I assented. The parents said that at 7 a. m. the baby was all right, the bowels having moved, showing a normal yellow stool, the kidneys were active and the child had nursed. At about 9:30 I was told that the baby was not breathing right and that I had better call, which I did, and found the conditions as follows: The heart action was very rapid and the face, hands and feet were cyanosed; there was gasping respiration with the intercostal spaces indrawn; the face was pinched in appearance; the fontanels natural and the temperature normal; the baby was light yellow in color.

As the disease progressed the yellow deepened to a light bronze; then to a dark bronze. There were hemorrhages from the mucous membranes two or three hours after the disease began. The urine was very dark, making a bronze stain on the napkin.

The general conditions grew steadily worse, till finally at 7 p. m. death occurred, the entire illness having lasted about ten hours. A diagnosis of infectious hemoglobinuria was made. As regards the treatment, aromatic spirits of ammonia were given, also alcohol baths and normal salt enemas.

New and Nonofficial Remedies

THE FOLLOWING ADDITIONAL ARTICLES HAVE BEEN ACCEPTED BY THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION. THEIR ACCEPTANCE HAS BEEN BASED LARGELY ON EVIDENCE SUPPLIED BY THE MANUFACTURER OR HIS AGENT AND IN PART ON INVESTIGATION MADE BY OR UNDER THE DIRECTION OF THE COUNCIL. CRITICISMS AND CORRECTIONS ARE ASKED FOR TO AID IN THE REVISION OF THE MATTER BEFORE PUBLICATION IN THE BOOK "NEW AND NONOFFICIAL REMEDIES."

THE COUNCIL DESIRES PHYSICIANS TO UNDERSTAND THAT THE ACCEPTANCE OF AN ARTICLE DOES NOT NECESSARILY MEAN A RECOMMENDATION, BUT THAT, SO FAR AS KNOWN, IT COMPLIES WITH THE RULES ADOPTED BY THE COUNCIL.

W. A. PUCKNER, SECRETARY.

GONOCOCCUS VACCINE.—(See N. N. R., 1912.)

H. K. Mulford Co., Philadelphia.

Neisser Bacterin Mixed.—Each Cc. is said to contain approximately 100 million each of killed staphylococcus (aureus, albus and citreus) and 50 million each of streptococci, B. coli, B. pseudodiphtheriæ and gonococci. It is marketed in packages of four 1 Cc. ampules. Also marketed in vials of 20 Cc. and in 4 syringes, Syringe A being of the composition mentioned above and constituting the initial dose, while Syringes B, C and D contain, respectively, 2, 4 and 8 times the amount of bacteria contained in Syringe A.

PNEUMOCOCCUS VACCINE.—(See N. N. R., 1912.)

H. K. Mulford Co., Philadelphia.

Pneumo-Bacterin Mixed.—Each Cc. is said to contain 50 million killed pneumococci, 25 million killed streptococci and 50 million killed staphylococci. Also marketed in vials of 20 Cc. and in packages of 4 syringes, Syringe A being of the composition mentioned above and constituting the initial dose, while Syringes B, C and D contain, respectively, 2, 4 and 8 times the amount of bacteria contained in Syringe A.

STREPTOCOCCUS VACCINE.—(See N. N. R., 1912.)

H. K. Mulford Co., Philadelphia.

Scarlatina-Bacterin (Scarlet Fever Vaccine).—It consists of a suspension of killed streptococci obtained from scarlet fever cases. It is marketed in packages of 4 syringes, Syringe A containing 50 million killed streptococci, while Syringes B, C and D contain, respectively, 2, 4 and 8 times the amounts of bacteria contained in Syringe A. The initial dose is from 10 million to 50 million.

Scarlatina-bacterin is also marketed for immunizing purposes in packages of 3 syringes, Syringe No. 1 containing 250 million killed streptococci and constituting the first dose, while Syringes No. 2 and No. 3, consisting, respectively, of the second and third doses, to be injected at intervals of seven days following the first dose, contain 2 and 4 times the amount of bacteria in Syringe No. 1.

Also marketed in vials of 20 Cc., each Cc. containing 500 million killed streptococci and sufficient for immunizing 5 persons.

TYPHOID VACCINE.—(See N. N. R., 1912.)

H. K. Mulford Co., Philadelphia.

Typho-Bacterin Immunizing.—The immunizing package of typho-bacterin contains 3 syringes, Syringe No. 1 containing 500 million killed typhoid bacilli, while Syringes No. 2 and No. 3 each contain 1,000 million killed typhoid bacilli. The contents of these syringes should be injected subcutaneously at intervals of ten days. Also marketed in hospital-size packages of 30 ampules, in sets of three, each set being sufficient for the complete immunization of one patient.

STAPHYLOCOCCUS VACCINE.—(See N. N. R., 1912.)

H. K. Mulford Co., Philadelphia.

Staphylo-Bacterin Mixed.—Staphylo-bacterin mixed is composed of a suspension of bacteria, each Cc. of which contains 25 million killed streptococci, 100 million killed staphylococci and 50 million killed B. coli.

It is marketed in packages of four 1 Cc. ampules, each Cc. of the composition given above. Also in 20 Cc. vials. Also in packages of 4 syringes, Syringe A being of the composition given above, while Syringes B, C and D contain, respectively, 2, 4 and 8 times the amount of bacteria contained in Syringe A.

TUBERCULIN.—(See N. N. R., 1912.)

H. K. Mulford Co., Philadelphia.

Von Pirquet Test for Tuberculosis.—Old tuberculin marketed in capillary tubes in packages of three and of ten. Each tube contains old tuberculin sufficient for one test.

ANTIRABIC VACCINE.—(See N. N. R., 1912.)

H. K. Mulford Co., Philadelphia.

Rabies Vaccine.—Rabies vaccine is prepared according to the method of Pasteur and is a complete treatment, consisting of 25 doses, to be administered during 21 days. Each day's injection is shipped in a Caloris vacuum bottle. Complete description and directions accompany each outfit.

Bass Test for Typhoid

Bass test for typhoid fever is a modification of the method of Widal.

H. K. Mulford Co., Philadelphia.

Bass Test for Typhoid Fever.—The outfit for testing blood for typhoid fever according to the Bass method consists of the following items: a. Suspension or emulsion of killed typhoid bacilli, each Cc. containing approximately 10 billion killed bacteria.

b. Glass slide on which to mix the emulsion with suspected blood.

c. Slide with dried smear of infected blood. This slide is to be afterward used for mixing the emulsion and suspected blood on Slide B.

d. Needle for pricking ear or finger to obtain suspected blood from the patient.

e. Pipette for dropping typhoid emulsion and water on slide, previous to mixing with suspected blood.

Widal's Test—Borden's Modification

In this test the serum of the blood is mixed with salt solution and then with a suspension of killed typhoid bacilli, so as to bring the dilution up to 1 to 50. The positive reaction is determined by noting that the clumps of bacteria sink to the bottom of the test tube and leave a limpid, clear fluid above a small, white, flocculent mass of agglutinated bacilli.

H. K. Mulford Co., Philadelphia.

Mulford's Widal Test Outfit (Widal Reaction for Serodiagnosis of Typhoid Fever).—The outfit consists of the following items, all packed in a box containing fixed test-tube rack: (a) 30 Cc. stock bottle of suspension or emulsion of killed typhoid bacilli; (b) 30 Cc. stock bottle of physiologic salt solution, containing 1 per cent. of phenol; (c) 10 Cc. dropping flask for salt solution; (d) 10 Cc. dropping flask for typhoid suspension; (e) 6 graduated test-tubes; (f) 1 graduated pipette; (g) 12 small capillary bulbs or tubes to collect blood-serum, and (h) 1 needle.

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ALTITUDE AND BLOOD-CORPUSCLES

The response of the human organism to altitude, as exemplified in an increase in the number of red blood-cells (erythrocytes) in the circulation, is familiarly pointed out as a useful compensatory reaction. The effect of a diminished partial pressure of oxygen accompanying the rarefaction of the atmosphere is equalized by the larger absorbing surface furnished by the increased number of oxygen-carrying cells. The facts here cited have played a part in the attempt to explain the physiologic effects of mountain resorts and elevated plateaus; and various therapeutic gains have been ascribed to them. The published statistics for the numbers of erythrocytes observed under such conditions give figures reaching 8,000,000 corpuscles per cubic millimeter, in contrast with the conventional 5,000,000 counted at lower levels.

Data of this sort have been attacked repeatedly as misleading. It has been asserted, for example, that these high figures do not represent a true gain in red blood-cells, but are the outcome of alterations in their distribution in the blood of various vascular areas. Or again, changes in the water-content (concentration) of the blood at altitudes have been made responsible for a relative increase in the number of corpuscles — a gain in hemoglobin which is apparent, rather than real. The debate is one of several years' standing.

It cannot be denied that in the past blood-counts have often been attended with a not inconsiderable percentage of error. It is interesting, therefore, to find the mooted question of the increase in erythrocytes at altitudes subjected to investigation by a careful student of the technic involved. Professor Bürker of Tübingen, to whom we owe the introduction of a new and efficient hemocytometer, has supervised a systematic examination of the blood of four trained observers at Tübingen (1,000 feet) and at Davos on the Schatzalp (5,600 feet), and subsequently at the lower altitude again. The location at Davos was not such as to induce the complications of mountain sickness. Although the investigation[1] has confirmed the current view of the influence of altitude on the blood, the effect was found to be decidedly less marked than is commonly assumed. A month's stay at the elevation of five thousand feet occasioned an increase of only about 5 per cent. in the number of red corpuscles and 7 per cent. in the hemoglobin content of the blood. This change came about rather speedily; and a decrease promptly followed the return to a lower atmospheric level. An examination of the blood of the same individuals a month later, in Tübingen, showed a persistence of rather high figures for the blood constants under consideration. The investigators believe that the electrical properties of the atmosphere and the insolation peculiar to mountain resorts can be excluded as causes of the physiologic effects reported. It was noted incidentally that the hemoglobin content of the blood was increased with falling temperature and the cold season — an effect assumed to be associated with acceleration of the oxidative changes in the organism. This is, perhaps, a typical response.

It may be objected that the results just reported must be discounted because of the small number of individuals examined. Nevertheless they have been the outcome of a careful study and are not without corroboratory evidence from other recent investigators. Herein lies the suggestion that the influence of altitude on the blood has perhaps been somewhat overvalued in climatologic discussions.

1. Bürker: Die physiologische Wirkungen des Höhenklimas auf das Blut, Verhandl. d. deutsch. Kongr. f. inn. Med., 1911, xxviii, 566.

FOSSIL MEDICAL WORDS

Words often have petrified within them whole chapters of history, literature, orthography, etymology or philology. So simple a word as "parson," for instance, carries with it a number of valuable hints as to history, etymology, orthoepy and the like. In the time of Chaucer, who wrote "The Persone's Tale," it was spelled with an *e*. The *e* before *r* was first pronounced as in "parson," and then the word was spelled with an *a*, this tendency being illustrated in the pronunciation of such names as "Berkley" and "Derby," and the spelling of "Clark," which is, of course, derived from "clerk." The word "person" comes from the Latin *persona*, which was originally used for the masks worn by the characters of a play and then was applied to the characters themselves —*personæ dramatis*. It was derived from *personare*, "to sound through and through," because the player's voice sounded through the mask, which was so constructed as to increase the apparent volume of sound. From a character in a play *persona* came to mean a character in life, an individual; and then, in the Middle Ages, the ecclesiastical representative of a parish was first called the "person" and later the "parson" of the village.

We have here a bit of the history of orthoepy, of drama and of social and political customs as well as of language, all condensed in the story of the word "person." There are many of our medical words that come

to us trailing clouds of knowledge in the same way and it would be unfortunate if the hints of medical history and science and the vicissitudes of terminology which they carry with them were altogether lost. A few examples will suffice to illustrate this and perhaps prove an incentive to those who care to follow up an interesting subject. To begin at the beginning of the alphabet, our word "amnion," the accepted word for fetal membrane, is rich in significance. It evidently comes from the Greek word for a lamb, ἀμνός. As the fetal membrane of the sheep embryo allows the parts of the fetus to be seen very clearly, it early became a subject for curious study and the outer membrane was called the amnios or amnion. Later when the study of the embryos of other animals and men was taken up, this word was transferred to them also. In the course of medical development at least half a dozen other good words, more directly significative, have been suggested, but "amnion" maintains itself and will probably continue to do so.

To go down a little in the alphabet, "carbuncle" is a very expressive word when its derivation from the Latin, *carbunculus,* a small glowing coal, is known. This exactly fits the fiery red lesion for which it was chosen as a name. There is a precious stone of a fiery red which is called by the same name for the same reason.

Occasionally we have two words in medical English from the same Latin or Greek original and sometimes there has even come a distinction of meaning into them: "palsy" and "paralysis" are typical examples. Both are derived from the Greek word παράλυσις. "Palsy" came into English long ago and "paralysis" much more recently. Horne Tooke's rule is that when a long word is derived from a foreign language some of the letters inevitably drop out in the course of time, "letters, like soldiers," as he quaintly says, "being apt to desert or drop off in a long march." "Alms," which is derived from the Greek ἐλεημοσύνη, is a typical example. Hence we have palsy as the old form for the word "paralysis," and now popularly at least there is a shade of difference in the meaning of the two words. "Paralysis" stands for the more serious organic lesions of the nervous system; "palsy" is more frequently referred to functional disturbance, tremors and the like that do not necessarily imply a complete loss of power over a part.

Sometimes it is very difficult to find the derivation of a term and then all sorts of imaginary derivations may be suggested. A typical example is the word "saphenous" as a distinguishing epithet for the large superficial vein of the leg. This used to be considered as probably derived from the Greek σαφής, meaning clear, evident, because, particularly whenever it is in a pathologic condition, it is so much in evidence. Hyrtl, in his work on Hebrew and Arabian words in anatomy, calls attention to the fact, however, that none of the ancient Greek medical writers — Hippocrates, Galen, Oribasius, or Theophilus — uses the word, which is of Arabic origin and derived from a root *safu,* which means exactly the opposite. It is the hidden vein because it runs in a portion of the body that is usually kept covered. Contradictory derivations of words such as this are not unusual. Sometimes the false derivation has quite satisfied scholars for the time.

"Uvula," to come down to the end of the alphabet, is a Latin word meaning a little bunch of grapes. It is a direct translation from the Greek σταφυλή, so familiar now in bacteriology in the word "staphylococcus," the coccus, or berry-form microorganism, which grows in bunches like grapes. Aristotle used the word σταφυλή for the uvula only when that organ was inflamed and swollen so as to resemble a grape on its stalk. Certain muscles attached to the uvula are still called staphyline from the Greek original.

Evidently there is as much curious information to be derived from the study of our medical words as Horne Tooke, in his "Diversions of Purley," showed there was to be obtained from the ordinary words of the language. Our fossil medical words are quite as rich in suggestion as any set of words in the language, and they carry in them, for those who can read the indicia, treasures of information in history, science, language, wordlore and folk-lore that make their significance deeper than before.

STREPTOCOCCUS TONSILLITIS ("SEPTIC SORE THROAT") AND MILK

In March, 1908, there occurred in Christiania an epidemic of streptococcal angina which was traced to the milk-supply. In this case the question whether the milk became contaminated from streptococcus infection of the udder or from infection of the throat of a dairymaid was not definitely settled, both possibilities being considered by the authorities who investigated the epidemic without agreement being reached.[1]

The disease was marked by acute onset with a rapid rise of temperature and acute tonsillitis and pharyngitis, often associated with loosely attached shreds of membrane; the glands in the neck sometimes became greatly swollen. In most cases the infection terminated by crisis after two or three days, but exceptionally there developed severe complications such as pyemia, acute nephritis, abscesses about the throat and otitis, and several deaths occurred. The bacteriologic examination revealed what seemed to be the same streptococcus in all the cases examined, but no minute study of the streptococcus seems to have been made, so that it is not possible to say whether it could have been differentiated from other streptococcal strains or not.

In May, 1911, a similar epidemic occurred in Boston and its vicinity.[2] The epidemic began on May 8, rose to a maximum in about six days and was practically at an end in two weeks. The cases were concentrated in

1. Melke Epidemien i Kristiania, Norsk Mag. f. Lägevidenskaben, 1908, lxix, 585, 811.

2. Winslow, C. E. A.: An Epidemic of Tonsillitis or Septic Sore Throat in Boston, Mass., and Its Relation to an Infected Milk-Supply, Jour. Infect. Dis., 1912, x, 73.

families, and the distribution coincided exactly with that of one of the two main milk-supplies of the Deerfoot company. A similar form of tonsillitis prevailed during the months of April and May in the region of Marlboro and in this case the disease seemed to spread slowly from person to person. The Deerfoot milk associated with the epidemic in Boston was derived from farms in Marlboro and adjacent regions. Nevertheless, it was not possible to obtain a record of any well-defined case of tonsillitis coming in direct contact with the milk, nor is it known that any disease occurred among the cattle on any of the farms supplying the incriminated milk, so that the exact manner in which the milk became contaminated is not known. At least 1,043 cases occurred in Boston and forty-eight deaths are attributed to the epidemic. Symptomatically the disease corresponds with the septic sore throat of the English, many small epidemics of which connected with the milk-supply have been described in England. Early there is a diffuse redness of the tonsils and adjacent regions and later follicular changes may develop. Swelling of the cervical glands and abscesses occur and diverse complications such as nephritis, pneumonia, pericarditis or general streptococcus infection may develop. In the case of the Boston epidemic also we lack detailed study of the streptococcus involved. In both these epidemics it is difficult to see how the contamination of the milk could have been prevented because all the usual precautions were taken. This is especially true in the case of the Deerfoot milk, as in this case the facilities for handling of the milk are of the very best, the entire process being under a close supervision by sanitary experts.

The lessons to be drawn from these outbreaks are the following:

1. Epidemics of streptococcus infection, localizing in the throat especially, may be due to contaminated milk-supply.

2. Streptococcus throat infection—"septic sore throat"—must be recognized as one of the dangers connected with the supply of raw milk even when this is most carefully supervised.

3. As pointed out by Winslow, the only real safeguard against such otherwise unpreventable outbreaks would seem to lie in pasteurization, carried out preferably by the holding system and in the final packages.

DIET IN TYPHOID FEVER

The problems of diet in typhoid fever are perennial. Between the extremes of starvation on the one hand and a liberal mixed diet on the other, the virtues of a great variety of regimens have been warmly debated by ardent advocates from time to time in the columns of THE JOURNAL. Well-known clinicians have insisted that there is a temptation to give too much rather than too little food, and have often maintained that as a rule patients are over- rather than underfed.[1] If one attempts, however, to ascertain the justification for these statements by calculating the available nutrients in the dietaries reported, it is usually difficult to discover more than a fraction of the energy requirement of the patient in the concoctions devised. Indeed, it cannot be emphasized too often that two quarts of milk—a large volume for bedside feeding—yield only 1,500 calories, a figure somewhat lower than that furnished by the metabolism of an adult man at complete rest. The lowest figure reported by Grafe[2] in a study of the heat production of typhoid patients was forty calories per kilogram of body weight.

Despite the appreciation of the self-evident facts of undernourishment the dangers, both real and anticipated, of too liberal use of food have stood as a barrier to what must seem to many as a rational amplification of the diet in typhoid fever. When, however, some one has ventured to enlarge its nutritive value, this has usually been attempted by adding some form of protein (eggs, albumin water, etc.) to the dietary, in apparent ignorance of the fact that protein is the very component which the restricted milk regimen furnishes in adequate amount. It was natural, therefore, to find much interest displayed in the researches of Coleman and Shaffer[3] showing that by the use of diets of high fuel value, especially when rich in carbohydrates, it was possible to diminish and even to prevent the febrile loss of body protein which on previous diets has been so characteristic of the disease.

The interval of several years has permitted the accumulation of clinical experience regarding the "high-calorie diet" advocated by Coleman; and he has lately published a most interesting report on the subject.[4] The broad conclusion is drawn from these data that "there is probably no infective disease, except those which affect the alimentary tract locally, which is benefited by partial or complete starvation." Recent nutrition studies strongly suggest that metabolism in typhoid fever follows normal laws. What, then, are the objections to the more liberal feeding? According to Coleman they relate to the ability of patients to digest and absorb the amounts of food recommended. A practical illustration of what these mean is given by the following simple 3,000 calorie diet, furnishing eight feedings per day: milk, 1½ quarts, cream 1 pint, milk-sugar 8 ounces. In view of the fact that, according to the experimental data furnished by Coleman, the digestive capacity of typhoid patients is surprisingly good, the objections raised do not hold so long as no patient is given more food than he requires or is capable of utilizing. The contra-indications are characteristic and the individual needs must be studied in every case. This is, after all, the little-appreciated secret to success in all dietotherapy.

1. McCrae: Osler's Modern Medicine, 1907, ii, 211.
2. Grafe: Deutsch. Arch. f. klin. Med., 1911, ci, 209.
3. Arch. Int. Med., 1909, iv, 538; THE JOURNAL A. M. A., 1909, liii, 1145.
4. Coleman: The High Calorie Diet in Typhoid Fever, Am. Jour. Med. Sc., 1912, cxliii, 77; abstr. in THE JOURNAL A. M. A., Jan. 20, 1912, p. 224.

Coleman clearly states that there is no reason to think that the high-calorie diet has any influence on the duration of the febrile stage of typhoid fever, but there is strong evidence that in the cases observed it modified the course of the disease favorably, shortened convalescence and reduced mortality. His own conclusions may be summarized in this statement: The clinical guides to the food requirement are the weight of the patient and the state of his appetite. A patient who is losing weight should be given more food if he can digest and absorb it. A patient who is hungry should be given sufficient food to appease his appetite. In the early stage of severe cases it is always difficult to give more than 3,000 calories a day; in the steep-curve period and convalescence, patients readily take more. If any article of food causes persistent disturbances the quantity should be diminished or the food stopped; if he cannot meet his requirement, the patient should be given all that he can digest and absorb. Carbohydrates should furnish the bulk of the energy. The daily protein ration should not exceed 95 grams. Clinical evidence points to the utilization of much fat with benefit.

Elaborate experimental studies like the foregoing are a credit to American medical science. They may be charged with the flavor of radicalism, but they can no longer be overlooked. Indeed things move along so rapidly now-a-days that people who say "It can't be done" are interrupted by somebody doing it.

UNIQUE FOOD PRESERVATION

In commenting on the ethics of sophisticating foods a well-known American agricultural chemist was wont to remark that although the addition of carrot color to butter is manifestly wrong, yet when carrots are fed in order to improve the color of the milk fat the viewpoint is altered; for this now involves adulteration with the connivance of the cow. A similar complication may arise in connection with new experiments by Dr. Oscar Riddle.

Bearing in mind the familiar fact that certain substances which are not readily oxidized or destroyed in the body may reappear in the secretions, such as milk, and in the eggs of animals, he has attempted to ascertain whether compounds exhibiting a preservative action are eliminated in this manner. Physiologically this question is of interest in relation to the permeability of the ovarian egg-membranes and the passage of substances from the blood through both follicular and vitelline membranes. The transportation of the fat-soluble dye Sudan III into the yolk of the hen's egg can easily be demonstrated, the coloring-matter appearing as rings of pink in a cross-section of the egg of a hen which has received the dye. Such pigments, insoluble in water, travel dissolved in fat in the organism, being deposited with it in characteristic locations such as adipose tissue or egg yolk, or being excreted with the fat of milk or dissolved in the special solvents of the bile.[1] In other words, compounds which are comparatively inert and not destroyed in the body may tend to find a suitable solvent and thus travel from place to place until eliminated in some way.

The migrations of hexamethylenamin are well known, for they form the basis for the rational use of this antiseptic drug internally in a variety of infectious conditions. The compound is known to reach the various lymphs of the body, such as the cerebrospinal fluid, and to be excreted in the bile and urine. The efficiency of hexamethylenamin is assumed to depend on the ready formation of formaldehyd therefrom. Riddle has found that the compound can permeate the egg-membranes of the fowl when it is fed to laying hens.[2] It undergoes decomposition in the eggs in which it is deposited and acts as a preservative, so that the time which ordinarily intervenes between the fresh and the unpalatable egg is lengthened. Here, then, is exemplified the "natural" production of eggs "capable of maintaining themselves against the ravages of time and the decomposing influence of temperature"!

Other preservatives, sodium salicylate and sodium benzoate, were similarly tested by feeding to hens. Their presence could not be detected chemically in the eggs; but it must be recalled that these compounds enter into new combinations in the organism and may reappear in some masked form. Riddle has obtained some evidence, though it is scarcely conclusive, that the eggs of hens thus dosed also withstand summer temperature better than do untreated control eggs.

Thus hath Science spoken; as for the revelations, the investigator declares: "To some veteran doubters it may seem that the triumph of the experiment would bring no blessings whatever; and some there may be who would even assert that its success and utilization really but spells new calamity to egg-users. We do not know; we repose in our innocent intentions, in our wonder and in our questions."

THE FINAL REPORT ON THE WILEY INVESTIGATION

The "Wiley investigation" is completed and the committee which conducted it — technically known as the Committee on Expenditures of the Department of Agriculture — has submitted its report to Congress. The public long ago exonerated Dr. Wiley, before even President Taft's letter to Secretary Wilson, dealing with the same problem, did so. Still it is worth while briefly to recall the salient points of the inquiry. The investigation was instituted because of an alleged conspiracy between Dr. H. H. Rusby on the one hand and Drs. Wiley, Kebler and Bigelow on the other, by which Dr. Rusby was to get a higher rate of compensation for his

1. Mendel and Daniels: The Behavior of Fat-Soluble Dyes in the Organism, Proc. Soc. Exper. Biol. and Med., 1911, viii, 126.
2. Riddle: The Permeability of the Ovarian Egg-Membranes of the Fowl, Science, Dec. 22, 1911, p. 887.

services than the law allowed. The committee heard the evidence and decided that there was no conspiracy. As their report states:

"We therefore find from the evidence adduced that the charges of conspiracy have not been established, but, on the contrary, that the accused officials were actuated throughout solely by a desire to procure for the Bureau of Chemistry an efficient assistant in the person of Dr. H. H. Rusby under terms and conditions which those officials believed to be in entire accord with the law, regulations, and practice of the Department of Agriculture."

It will be remembered that President Taft, in his letter to Secretary Wilson, discussed the disadvantages to which the government was subjected by being strictly limited in the amount which it could pay experts who were to appear in its behalf. As the President said, these limitations "are of doubtful legislative policy." The committee agrees that the government should not be so hampered, but it points out that the intolerable situation that at present exists "is not a result of a legislative policy, but arises from an executive order issued by Secretary Wilson." The executive order referred to is the one in which Mr. Wilson gave Solicitor McCabe the power of "fixing the compensation of the men after they have been chosen by Dr. Wiley," and thus practically put McCabe in control of Dr. Wiley's department. The committee recommends the abolition of this method of regulating fees and compensation and expresses the opinion that Congress should enact laws to deal effectively with the situation.

The criticism of Secretary Wilson — which was expected, and deserved—does not materialize. This may have been due to the desire on the part of the committee to save the feelings of an old man who, while having done valuable work in the past, has outgrown his usefulness in government service. Or, more likely the softening of the report is due to political expediency which the nearness of a presidential campaign has engendered. At any rate, the committee charges Wilson with nothing more serious than a fundamental "misconstruction of the law":

"From the beginning, however, the honorable secretary has apparently assumed that his duties in the proper enforcement of the pure food law are judicial in character, whereas in fact they are wholly administrative and ministerial."

As THE JOURNAL has often pointed out, Secretary Wilson's attitude has always been: When in doubt, favor the manufacturer. Dr. Wiley, on the other hand, has taken the diametrically opposite view, namely: When in doubt, favor the public. It was Dr. Wiley who suggested that, as there is more than a reasonable question about the wholesomeness of sodium benzoate, saccharin, sulphites, etc., they should not be permitted in the people's foodstuffs until it has been proved beyond a doubt that these things are harmless. Secretary Wilson, however, gave permission that all of these drugs might be used in foods until further work had been done to determine their harmlessness or harmfulness. In this connection, the following, by the committee, is interesting:

"Congress, in enacting this law, did not provide that its provisions shall remain in abeyance until we shall have completed any given course of scientific research."

The legal status of the Referee Board is discussed at some length. Attention is called to the fact that Assistant Attorney-General Fowler prepared a formal opinion in which he held that there was no legal authority for the creation and maintenance of the Referee Board. The Fowler opinion was not adopted, and McCabe, who was made solicitor of the Department of Agriculture, by his chum's father, Secretary Wilson, was called on to prepare a memorandum, giving the legal status of the Referee Board. McCabe's memorandum held that the board was entirely legal. After considering these two opinions, together with the opinion of Attorney-General Wickersham and the provision of section 161 of the revised statutes, the committee concludes:

"Your committee is of the opinion that there may be authority under the law for the creation and maintenance of such board to aid the secretary in the discharge of any duty enjoined on him in his official capacity, but raises the question as to its legality on the sole ground that the determination of the general questions submitted by the secretary to the Referee Board is not enjoined upon him under the law."

The committee further questions "the necessity, wisdom, or sound policy of maintaining such a board at a heavy expense to the government, when the work done by it is largely a duplication of work performed, or which might be performed, by the Bureau of Chemistry." The committee's opinion of the legal status of the findings of the Referee Board are thus expressed:

"The functions of this board as at present constituted are purely advisory. Their decisions have no legal or binding effect upon anybody. The secretary can follow or ignore their recommendations as he sees fit."

In spite of the fact that the members of the Referee Board "are merely the personal advisers of the secretary on the scientific questions submitted to them for determination," the committee says:

"The honorable Secretary of Agriculture seems to have regarded the findings of this board as conclusive in all cases, over the opinions and the findings of the Bureau of Chemistry, the tribunal which by express terms of statute is vested with authority to determine the questions of adulteration and misbranding within the meaning of the act."

Attention is called to a further anomaly, namely, that the Bureau of Chemistry has been prevented by Secretary Wilson "from examining any specimens of foods and drugs under any general subject which is submitted to the Referee Board." This, the committee states, has resulted in another remarkable situation:

"That under the practice of the department the decisions of the Bureau of Chemistry, if in opposition to the findings and opinions of the Referee Board, cannot be referred to

the courts and thus permit a judicial decision to be made, as is comprehended under the plain provision of the law. It would thus happen that, if the Bureau of Chemistry were right and the Referee Board were in error, violation of the law would receive protection through the supposed enforcement of the law; because the effect of such a policy is to give this advisory board, created by executive order, paramount authority over the Bureau of Chemistry and lodges in the personal advisers of the secretary the power to annul the decisions of the bureau within the Department of Agriculture, which was created by law."

It is not surprising that the committee, having arrived at these conclusions, states that it "cannot recommend its [the Referee Board's] further maintenance under its present status." In short, it is the opinion of the committee that:

"A board exercising functions such as are exercised by the Referee Board, its decisions being given such far-reaching effects by the honorable secretary, ought not to rest on the authority of an executive order. If such board be deemed necessary or advisable in the proper administration of the pure food law, its authority should be expressly conferred, its scope and jurisdiction clearly defined, and the effect of its decisions declared, by act of Congress."

The report closes with the statement that while the members of the committee are unanimous in their conclusions "they are not in full accord as to all of the reasons by which these conclusions are reached."

Current Comment

THE PROPOSED ROYAL COMMISSION ON QUACKERY —A PROPHECY

There seems to be little doubt that the propaganda against "patent medicines" in Great Britain has reached the place where a royal commission will be appointed to investigate the nostrum evil. This investigation will doubtless prove interesting and instructive and may be counted on to throw much light into dark places. While the recommendation for the appointment of such a commission has been fathered by the British medical profession, we venture to predict that if the investigation is broad and impartial, the medical profession of Great Britain will not be held entirely blameless for the very evil it deplores. While the British Medical Association has done splendid work in the last few years in exposing fraudulent "patent medicines," it has, unlike the American Medical Association, neglected to clean its own skirts first. No attempt has been made, so far as can be seen, to purge the British medical profession of the innumerable fraudulent proprietary remedies with which it is afflicted. American and European nostrums of the "ethical proprietary" type hold high revel in the advertising pages of high-class medical journals in Great Britain. Even advertisements of the notorious Antikamnia, which practically all American medical journals of any standing — the esteemed New York *Medical Record* always excepted — have for years debarred from their pages, is still carried by such English journals as the *Practitioner*, the *Lancet* and the *Medical Press and Circular!* It is perfectly evident that the "patent-medicine" men's organization in Great Britain will attempt to defend its members, and one of the first questions that will be raised is: Wherein is it any worse for the public to buy medicinal preparations about which it knows nothing, than it is for medical men to prescribe medicinal preparations about whose composition they know nothing? There can be only one answer to this question and we believe not only that the British medical profession will find difficulty in justifying its position on the nostrum question, but also that this very difficulty will do much to offset the good that such a royal commission might otherwise accomplish.

THE NEW ORLEANS SCHOOL OF TROPICAL MEDICINE AND HYGIENE

Beginning with the September term, 1911, the medical department of Tulane University inaugurated laboratory and systematic courses in tropical medicine, hygiene and preventive medicine. It is the intention of the university to develop this feature of the medical school and obtain a sufficient endowment to broaden it into a full school of tropical medicine and hygiene, embracing all the divisions of such an institution. New Orleans is peculiarly well located for the establishment of such a school, being a semitropical city in which numerous cases of the semitropical and tropical diseases appear and being in close proximity to and in the line of travel from the Central and South American countries. The opening of the Panama Canal with its traffic from the south and the east will also doubtless furnish much material and opportunity for the study of tropical diseases. Already the university has developed some efficient men in the study of these diseases, notably in leprosy, hookworm, pellagra and malaria, Bass, in his recent study and cultivation of the plasmodium of malaria, having opened up a new avenue in the study of tropical protozoan diseases. The enterprise and scientific foresight of Tulane University in establishing the first school of tropical medicine in America should be encouraged by a sufficient endowment to enable it to carry on the work with the greatest effectiveness. With the nearness of the opening of the Panama Canal and the consequent stimulation of travel to and from tropical countries the time is particularly opportune for the establishment of such a school.

THE AUTOMOBILE NUMBER

Manuscripts and illustrations are being received for our Automobile Number. In addition to the topics suggested in our comment two weeks ago,[1] various correspondents have asked that the following points be taken up: the efficiency of the various self-starting devices; the use of the automobile during the winter; means of increasing winter comfort by wind shields, removable tops, foot-warmers, etc.; a shop for home repairs by the physician himself, to save the large expense of having repairs made at public garages and the repair shops; the best kind of a car for hilly, rough roads; the best means of tire-economy; the physician's

1. THE JOURNAL A. M. A., Jan. 20, 1912, p. 198.

part in a good-roads movement, and other practical topics. As to illustrations, we desire those which — in addition to a clear view of the physician and his motor car—show his house or garage or family or office, the local medical society's library building or laboratory (if the society is so fortunate), some notable bit of local scenery, or some other feature that will add interest. Drawings of garages, repairs, accessories, tools, etc., which the physician has devised and which will be of aid to other physicians will also be welcomed. We shall be glad to hear promptly from all who intend to contribute to the Automobile Number, so that space may be saved for them.

JUST ONE EXAMPLE

Such newspapers as are not above sharing the blood-money of the "consumption cure" frauds are carrying an advertisement that makes the following claim:

"DUFFY'S PURE MALT WHISKEY CURES CONSUMPTION."

In addition to this cruel lie are others equally false, but not so cruel, such as: "The greatest known heart tonic," "It stimulates the blood," "Cures asthma." What do you think of newspapers that will sell advertising space to such a fraud as the Duffy Malt Whiskey concern? We know the answer. Let us ask another. What do you think of medical journals that will carry advertisements for the same fraud? We are not so sure of the answer. The following are some of the publications which — theoretically — are supposed to represent the medical profession and which yet carry the Duffy's Malt Whiskey advertisement:

Buffalo Medical Journal	*Medical Standard*
Massachusetts Medical Journal	*Medical Summary*
	Medical Brief

Mere advertising sheets that are a disgrace to the profession, do you say? Agreed. And yet not wholly agreed, either; for at least one of these—the *Buffalo Medical Journal* — has potentialities for better things and its reading pages are to be commended. In general, however, the criticism holds, and these journals are kept alive because physicians patronize them! To the general public one medical journal seems very much like any other medical journal. Is it any wonder that the decent element in the profession has difficulty in persuading law-makers that its fight against nostrums is in the public interest?

SHERLOCK HOLMES ON THE OWEN BILL

Sherlock Holmes, as portrayed by his gifted creator, Dr. A. Conan Doyle, was able to accomplish wonders in deduction by elimination. In solving a problem, he considered all possible explanations until he had eliminated all but one. The remaining explanation must be the correct one. Let us apply this process to the opposition to a national department of health. The National League for Medical Freedom was incorporated, according to its own statement, about May 1, 1910. The public first knew of its existence on May 18, 1910, when a large display advertisement appeared simultaneously in the leading newspapers of the entire country. At this time, the organization could not have had a large membership, as it was only two weeks old; indeed, it must have been entirely unknown to the great mass of the public. Yet the initial advertising contract, as estimated by one of the leading advertising agencies, amounted to nearly $50,000 ($49,410 are the exact figures). Who contributed or advanced this large sum? Obviously, some person or persons willing to pay $50,000 to see the Owen bill defeated. Then there must be something in the Owen bill that some persons were willing to pay $50,000 to prevent. You can fool a mob or a sect, by vague talk about "personal liberty," "trusts," "medical tyranny" and such bugaboos, but when a group of business men put up $50,000 they have a sound reason for it. Now the only thing the Owen bill does is to transfer three existing bureaus to a new department. These bureaus are the Public Health and Marine-Hospital Service from the Treasury Department; the Division of Vital Statistics from the Bureau of the Census and the Bureau of Chemistry from the Department of Agriculture. Any one can verify this by reading the bill. The first two bureaus could have no great influence on business, no matter in what department they were located. Their transfer would not menace any business interests. Therefore, the only remaining explanation for the opposition is to be found in the transfer of the Bureau of Chemistry, now in the Department of Agriculture, to the proposed Department of Health. But why should business interests be willing to pay $50,000 to keep the Bureau of Chemistry in the Department of Agriculture? Because Dr. Wiley, who is head of the bureau, might be controlled or hampered in the Department of Agriculture, but could not and would not be hampered in a Department of Health. So the "patent-medicine" and adulterated food manufacturers and their advertising agents, who, hiding behind the misled and misinformed Christian Scientists, sectarians and faddists, are pulling the strings, were willing to contribute $50,000 to keep Wiley where he is. The real reason for the opposition to the Owen bill is that its passage will untie Wiley's hands. "Elemental, my dear Watson, elemental."

ARE CHILDREN WORTH SAVING?

Are the children of the United States worth one-eighth as much as the bugs? Hon. Andrew J. Peters, a member of Congress from Massachusetts, asked this rather startling question at Louisville last Sunday at a mass-meeting on child labor. Mr. Peters showed that the Bureau of Animal Industry costs the country $1,654,750 a year, and that the Bureau of Plant Industry costs $2,051,686. The proposed children's bureau would cost $29,440 and would investigate child labor, infant mortality and other important phases of child conservation. It is being opposed, of course, by some manufacturers who want to employ babies in cotton-mills, coal-mines and other places admirably adapted for the growth of mind and body and the development of sturdy American men and women. In some quarters the investigation of child labor is regarded as an unwarranted invasion of personal liberty. Certainly! Public schools were so regarded in their early days.

No doubt we shall soon have a National League for Juvenile Freedom, secretly financed by the coal and cotton barons, and demanding for the child the right to labor when and where it pleases. In the meantime, if Congress thinks the baby crop is worth as much or one-tenth as much as the fruit crop, a children's bureau should be established without delay.

FARM WELFARE AND HUMAN WELFARE

Sixty-two railroad trains, operated by officers of experiment stations of the Department of Agriculture, traveled over 35,000 miles during 1911. Public meetings held by these officers were attended by nearly 1,000,000 persons. Traveling schools to the number of 149 were attended by 40,000 farmers and farmers' boys. Farmers' institutes held 15,000 sessions, attended by 2,000,000 people. These interesting facts and many more appear in the annual report of the director of this department to Secretary Wilson, recently made public. A summary of this report appears in a current newspaper, and, by a peculiar coincidence, in the adjoining column is a summary of the mortality report of the Census Bureau for 1910, issued about the same time. From this it appears that, in the "registration area," tuberculosis killed 86,309 persons in 1910, that 805,412 persons died in the same territory, and that in about one-half of the United States no effort is made to find out how many people die each year, to say nothing of running special trains and holding public meetings or schools to teach the people how to live.

HONORS ARE EVEN

We learn from our British contemporaries that among those who shared in the honors distributed on the occasion of the Durbar ceremony were two British "patent-medicine" exploiters, who have made their millions from the gullible sick, and who have now received the order of knighthood from King George. The occasion seems one that is pregnant with opportunities for sarcastic comment, at the expense of royalty and monarchical governments. But then we unwillingly remember that genial personage whose relationship to the Duffy's Malt Whiskey outfit and the canning company that sold short-weight products has often been the subject of comment—the gentleman whom a free people elected to the second highest office it has to give, namely the vice-presidency of the United States. After which, it seems, the less said the better.

EPIDEMIC CEREBROSPINAL MENINGITIS

The appearance of cerebrospinal meningitis in serious epidemic form in Texas[1] and sporadically in numerous places in other states has intensified interest in this dangerous disease. In the last issue of the Public Health Reports is a timely paper by Dr. W. H. Frost[2] which covers the history, the etiology, the diagnosis by lumbar puncture, the epidemiology, the prophylaxis and the treatment, and sets forth concisely our present knowledge of this disease. Through the studies of recent years four vital points concerning this disease have been practically settled, namely, the identification of the causative organism, the diagnosis by examination of the spinal fluid, its effective treatment by the anti-meningitis serum and the location of the infective agent on the nasopharyngeal mucosa of those afflicted as well as on that of many healthy carriers. The determination of this latter point, however, has not aided much in prophylaxis or in the establishment of efficient isolation or quarantine measures to prevent the epidemic spread of the disease. It has been stated by Flügge that healthy carriers are ten times more numerous than recognized cases of meningitis, and are more than ten times as prolific as a source of infection for others. It will thus be seen that a determination of all carriers by examination, or even isolation of all associates of every recognized case, would be a most difficult matter, and, as Frost says, the rigid quarantine of either houses or communities on account of cerebrospinal meningitis seems ordinarily unjustified. Bacteriologic examination to discover all carriers would be impracticable, and if this could be carried out they would be difficult of control. There are, however, some general measures that will undoubtedly aid in preventing the spread of this disease and among them are the early diagnosis and isolation of suspected cases and prompt serum treatment, perhaps in special hospitals during epidemics. The following of proper hygienic regulations by individuals no doubt will aid. The infective agent is found only in human beings and is believed not to survive long after separation from the host. Notwithstanding this fact, however, its somewhat erratic spread during epidemics is still much of a mystery. The article by Frost is such a complete, though brief, presentation of our present knowledge of this disease that it should be of extreme interest to physicians at this juncture.

1. Department of Medical News, under Texas, THE JOURNAL A. M. A., Jan. 20 and 27, 1912.
2. Pub. Health Rep., Jan. 26, 1912.

Medical News

ALABAMA

Personal.—Dr. Floyd G. Donehoo, Oneonta, is reported to be critically ill.——Dr. John W. Watts, Birmingham, has been appointed physician to the State Convict Camp at Flat Top, vice Dr. George Hogan, Birmingham, resigned.

New Officers.—The following elections of officers in county medical societies are announced: St. Clair County, at Odenville, recently, president, Dr. Jesse O. Gray, Pell City; vice-president, Dr. William B. Johnson, and secretary and treasurer, Dr. James P. Turner, Cropwell.——Coosa County, at Rockford, December 12, president, Dr. Julius Jones (re-elected).——Bibb County, at Centerville, December 13, president, Dr. M. B. Williams, Centerville; vice-president, Dr. M. C. Thomas, Belle Ellen; secretary and treasurer, Dr. James F. Alexander, Blockton.——Pike County, at Troy, December 14, president, Dr. Lee Roy Boyd, Troy; vice-president, Dr. Huey Watson, Banks, and secretary, Dr. Homer S. Stallings, Goshen.——Lauderdale County, at Florence, recently, president, Dr. Louis W. DesPrez; vice-president, Dr. E. Burke Hardin, and secretary and treasurer, Robert M. Davis, all of Florence.——Montgomery County, at Montgomery, December 9, president, Dr. Robert N. Pitts; vice-president, Dr. Philip B. Moss, and secretary and treasurer, Dr. Paul S. Mertins, all of Montgomery.——Cullman County, at Cullman, president and treasurer, Dr. Gottlieb Hartung, Cullman; vice-president, Dr. Luther Hays, Cullman, and secretary, Dr. James W. Cullpepper, Cranehill.

——Calhoun County, at Anniston, December 5, president, Dr. Erastus T. Barker, McFall, and vice-president, Dr. Samuel J. McCurry, Anniston.

CALIFORNIA

New Instructors at Stanford.—The following additions to the faculty of the Medical School of the Stanford University were announced: Drs. Rufus L. Rigdon and Albert B. McKee, professors of clinical surgery; Dr. Emanuel C. Fleischner, instructor in pediatries; Drs. Herbert H. Yerington and Florence M. Holsclaw, assistants in pediatrics; Dr. Morton R. Gibbons, instructor in medicine; Dr. W. B. Boardman, instructor in the medical clinic, and Drs. F. H. Adler and C. E. Hyde, assistants in the medical clinic.

The Hitchcock Lectures.—Dr. Richard Mills Pearce, professor of research medicine in the University of Pennsylvania, delivered a course of five lectures on the Hitchcock Foundation, on the evenings of January 22-26, inclusive, at the University of California, Berkeley. The general subject of the series was "Research in Medicine" and the individual lectures were on the following subjects: "Antiquity to 1800. The Efforts of Isolated Investigators"; "The Development of Laboratories for the Medical Sciences"; "Pasteur and the Rise of Bacteriology"; "Present Day Methods and Problems," and "Medical Research in American Universities; Present Facilities, Needs and Opportunities."

Personal.—Dr. Thomas W. Huntington, San Francisco, president of the Medical Society of the State of California was the guest of honor at the dinner of the San Diego County Medical Society, January 18.——Dr. Frederick W. Browning, Hayward, has been appointed president of the committee of public health standards of California.——Dr. James W. Clark, Santa Rosa, has been appointed one of the managers of the Napa State Hospital.——Dr. Elmer E. Stone, Napa, medical superintendent of the Napa State Hospital, has resigned.——Dr. William E. Alumbaugh, Napa, is reported to be seriously ill at his home. ——Dr. Harold A. Thomson has been elected city bacteriologist of San Diego.

ILLINOIS

Honor Old Practitioner.—The annual banquet of the Peoria City Medical Society was held in the Creve Coeur Club, Peoria, January 23. The guest of honor was Dr. Otho B. Will.

Oldest Physicians in Illinois.—The State Board of Health in its last bulletin devotes considerable space to the aged physicians of the state, and states that Dr. F. R. Pitner, Jacksonville, is the oldest living practitioner. It also gives a list of one other physician above 90; of nineteen above 80, and of six above 75 years of age; and also a list of three who graduated prior to 1850, and of thirty-three who graduated in the decade between 1851 and 1860.

Hospital News.—At the annual election of the Oak Park Hospital, January 20, Dr. William F. Scott, Maywood, was elected president; Dr. Anthony Rud, Austin, vice-president, and Dr. Arthur Loewy, Oak Park, secretary and treasurer.—— The Sycamore Hospital has been thoroughly renovated and refurnished and is now ready to receive patients.——Bids have been asked for on the construction of Dr. Alpheus A. Bondurant's Sanitarium, Cairo.——The East St. Louis Board of Health has passed resolutions favoring a municipal hospital, with ambulance service.

Personal.—Dr. Alton J. Higgins, Huntley, who has been ill in St. Joseph's Hospital, Elgin, on account of hemorrhage following the extraction of a tooth, has recovered.——Dr. Henry Reis, Jr., Belleville, had a narrow escape from drowning, January 19, in a cistern in the basement of the building in which his office is located.——Dr. Frank K. Hill, Rockford, has recovered from an attack of inflammatory rheumatism.——Dr. Dwight E. Burlingame, Elgin, who has been seriously ill, is reported to be improving.——Dr. Frank J. Otis, temporary superintendent of the Tri-City Sanitarium, assumed charge of the institution, February 1, and has located in Moline.—— Dr. Elizabeth Matthews, Springfield, has returned from Europe. ——Dr. Elwood A. Kingston, Lockport, is in the Silver Cross Hospital, Joliet, suffering from an infected wound of the arm. ——Dr. Ralph P. Grimm, Glasford, who was operated on for appendicitis several weeks ago, was again operated on in the Canton Hospital recently on account of adhesions.

New Officers.—Mason County Medical Society, at Mason City, January 8: president, Dr. Edward W. Paul, Forest City, and secretary-treasurer, Dr. Frederick F. Garrison, Havana (reelected).—Jo Daviess County Medical Society, at Warren, January 10: president, Dr. William H. Miller, Galena, and secretary-treasurer, Dr. Domer G. Smith, Elizabeth.—— Winnebago County Medical Society, at Rockford, January 9: president, Dr. Daniel Lichty, and secretary-treasurer, Dr. Frank W. Hanford, all of Rockford.——St. Clair County Medical Society, at Belleville, January 8: president, Dr. Frank E. Auten, and secretary, Dr. Buenaventura H. Portuondo, both of Belleville.——Sangamon County Medical Society, at Springfield, January 8: president, Dr. Samuel E. Munson, and secretary-treasurer, Dr. Harry C. Blankmeyer, both of Springfield. ——Coles County Medical Society, at Charleston, January 2: president, Dr. Robert H. Craig, Charleston, and secretary-treasurer, Dr. James G. Baker, Mattoon.——Aurora Medical Association: president, Dr. D. De Les Culver, and secretary-treasurer, Dr. G. B. Schwatgen.

Chicago

The Travelers.—Drs. D'Orsay Hecht and Edmund J. Doering, Dr. and Mrs. Fenton B. Turck and Dr. and Mrs. Albert H. Hoy have sailed for Europe.——Dr. and Mrs. James A. Harvey and Dr. Elmer L. Kenyon have returned from Europe.——Dr. Jacob Frank has sailed for South America.

Want Million Dollar Endowment.—The trustees of Wesley Hospital have inaugurated plans for increasing the endowment of Wesley Hospital to $1,000,000. This campaign is to be conducted in connection with the twenty-fifth anniversary of the granting of the charter of the hospital in October, 1888.

More Land for Medical School.—Northwestern University has concluded a series of purchases on Dearborn Street between Twenty-Fourth and Twenty-Fifth streets, by the acquisition of a lot 48 by 106 feet, partially improved, for $15,000. It has acquired a total of 624 feet frontage, at a cost of about $160,000.

Personal.—Dr. Waldemar Koch is reported to be seriously ill in Wesley Hospital.——Dr. William D. Clark, an intern in St. Luke's Hospital, was held up and robbed January 21.—— Dr. Egil T. Olsen, medical examiner in charge attached to the Civil Service Commission, has been appointed temporary head of the bureau of hospitals, baths and lodging houses.——Drs. Edwin Pynchon and J. Frank McKinley are both suffering from Colles fractures.——Dr. and Mrs. Daniel A. K. Steele sail from San Francisco, February 6, on a trip round the world.

Contagious Disease Hospital Soon to Open.—The "Annie W. Durand Hospital, in Charge of the Medical Institute of Infectious Diseases," at the corner of York and Wood streets, is now under construction and will be ready for occupancy in the early fall, with an endowment and full equipment for forty-five patients. The building is to be a three-story structure with a basement and sun parlor. It is stipulated in the agreement as well as in the donation of the two funds by which this hospital has been constructed and is endowed, that there are to be no pay patients in the institution.

The Chicago Tribune-Chicago Medical Society Free Lecture Course.—The *Tribune* has joined with the South Side Branch of the Chicago Medical Society in furtherance of a movement for the enlightenment of the public along the line of general health. Arrangements have been completed whereby a series of free lectures is being given for the benefit and better understanding of those who care to attend. The lectures began February 1 with a lecture by Dr. John M. Dodson at the Lincoln Center, Langley Avenue and Oakwood Boulevard, on "What the State of Illinois Is Not Doing for Children." The succeeding lectures will be held on successive Thursday evenings as follows: "The Prevention of Blindness and the Conservation of Vision;" discussion by Drs. Thomas A. Woodruff, Frank Allport, William H. Wilder, George B. Young and Caroline Hedger and Messrs. D. P. McMillan, R. J. Young and J. R. Cravatt and others, February 8. "Medical Dangers to the Youth of Chicago," by Dr. G. Frank Lydston, February 15. "Occupational Diseases," by Dr. George W. Webster, February 22. "The Relations of the Midwife to the Community," by Dr. Charles E. Paddock, February 29, and "The Infant and What the World is Doing for It," by Dr. Isaac A. Abt, March 7.

NEBRASKA

State Sanatorium Soon to Open.—The Nebraska State Tuberculosis Sanatorium at Kearney is completed, but not yet entirely equipped. It is expected that it will be ready to receive patients in a few days.

County Medical Society Wants Club.—At the recent meeting of the Lancaster County Medical Association in Lincoln, the members expressed their preference for a club with an accompanying library, provided that suitable accommodations could be obtained. The State University is no longer able to give space to the library of the State Medical Association.

Vital Statistics.—The State Board of Health reports that during the year 11,499 deaths and 26,819 births were recorded. Of the deceased, 222 were caused by accident; 142 by suicide; 101 by railroad casualties; forty-eight by firearms and forty-two by drowning. The chief death causes were; infantile diseases, 1,843; pneumonia, 1,248, and heart disease, 1,110.

New Officers.—Elkhorn Valley Medical Association, at Norfolk, January 17: president, Dr. Arthur C. Stokes, Omaha; secretary, Dr. Harry L. Wells, West Point.——York County Medical Society, at York, January 6: president, Dr. Jerome C. McKinley, and secretary-treasurer, Dr. James N. Plumb, both of York.——Hall County Medical Society, at Grand Island, January 3: president, Dr. Leopold Phelan (reelected), and secretary-treasurer, Dr. William T. Engleman, both of Grand Island.——The Nebraska State Medical Association has elected Dr. Joseph M. Aikin, Omaha, secretary, vice Dr. Alonzo D. Wilkinson, Lincoln, deceased.——Lincoln County Medical Society, at North Platte: president, Dr. Fyfield H. Longley, and secretary, Dr. William W. Saddler, Hershey.——Nuckolls County Medical Association, at Nelson, January 19: president, Dr. Edward D. Been, Hardy, and secretary, Dr. Frank Mitchell.

Personal.—Dr. Otto E. Longacre, Loup City, who was operated on recently in St. Francis' Hospital, Grand Island, has recovered.——Dr. Thomas C. Boler, Omaha, suffered severe contusions of the shoulders and head in a collision between a taxicab, a coalwagon and a street car, January 16.——A banquet was given by the medical profession of South Omaha to Dr. Clinton E. Sapp, January 13, who is soon to leave the city and locate in San Diego, Cal.——Dr. E. P. W. Chaloupka, South Omaha, has been elected medical director of the Western Indemnity Company.——Dr. Henry D. Boyden, Grand Island, is reported to be seriously ill in the Clarkson Hospital, Omaha.——Dr. Godfrey C. Fritchel, Grand Island, has been appointed local surgeon for the Burlington System.——Dr. Thomas Kelly, South Omaha, was stricken with cerebral hemorrhage recently.——Dr. Arthur F. Conery, Neligh, who slipped and fell January 1, sustaining serious internal injuries, is reported to be improving.

NEW YORK

Personal.—Dr. Walter G. Ryan, assistant superintendent of the Willard State Hospital, has been appointed medical inspector of public and private institutions for the insane.——Dr. Edward S. Willard has been reappointed health officer of Watertown.

University to Build Dispensary.—The board of trustees of Syracuse University, at its mid-winter session, January 16, voted to establish a dispensary for the use of the medical college, to cost $75,000. The dean, Dr. John L. Heffron, Syracuse, was named as chairman of the committee to formulate plans and he will name three members of the faculty of the College of Medicine to act with him.

Civil Service Examinations.—The State Civil Service Commission will hold examinations on February 24, for the following positions: Bacteriologist, female, to the Health Officer of the Port of New York; Inspector, State Board of Pharmacy; Physician, Homeopathic and Regular; Veterinarian and Physician, Erie County Lodging House. Detailed information and application blanks may be had by applying to the State Civil Service Commission, Albany, N. Y.

Clash on Vaccination.—As the result of a clash between the local board of health and the board of education of Olean, N. Y., 1,400 children have returned to school without being vaccinated. The board of health ordered all children vaccinated while the board of education told them they might return whether vaccinated or not. As small-pox is prevalent in that section the board of health claims that the children are being exposed to the disease, but waives its order, under protest, until the legislature shall clear up this conflict in the law.

New York City

Harvey Society Lecture.—The eighth lecture of the present course of Harvey Society lectures given February 3 at the New York Academy of Medicine by Prof. T. W. Richards of Harvard University is on "The Relations of Modern Chemistry to Medicine."

New Officers.—The Flatbush Medical Society was organized in Brooklyn, January 12, and the following officers were elected: president, Dr. Burt D. Harrington, and secretary, Dr. William H. Bayles.——Brooklyn Medical Association at its annual meeting, January 10, elected Dr. George F. Maddock, president, and Dr. Adolph Wieber, corresponding secretary.

McKinley Stamps on Sale.—The William McKinley Memorial Hospital League has put stamps on sale at 1 cent apiece which are to be used after the fashion of the Red Cross seals. It is hoped by this means to eventually raise $7,000,000, half of which will be used for a McKinley Memorial Hospital in New York City and half for a national campaign against tuberculosis.

Vanderbilt Home Opened.—The group of apartment buildings erected by Mrs. W. K. Vanderbilt and rented for a nominal sum, intended for persons suffering from incipient tuberculosis, have been opened for public inspection. The buildings will accommodate 383 families in flats of from two to five rooms. The buildings are provided with roof gardens and sleeping-porches.

Health Board Bars Wood Alcohol.—At its meeting on January 23, the board of health adopted a new section of the sanitary code which prohibits the sale or use of wood alcohol in any food or drink or in any preparation or mixture intended for internal or external use by man. This amendment has as its aim not only the prevention of the use of wood alcohol in foods but its use in hair tonics, face lotions and other external applications.

Dr. Wiley Dined.—The evening of January 23 was "Doctors' Evening" at the University Club in Brooklyn and Dr. Harvey W. Wiley was the guest of honor. Among the other speakers were Dr. William M. Polk, dean of the Cornell Medical College; Dr. Eugene H. Porter, formerly state health commissioner; Dr. Edward E. Hicks, Brooklyn; Dr. Elias H. Bartley, Brooklyn, of the Kings County Medical College, and Zachary T. Emery, formerly health commissioner of Brooklyn.

To Educate Young Mothers.—The statement of physicians that at least 25 per cent. of the babies born on the East Side die as the result of improper feeding or care has led to the organization of a society in connection with the Jewish Maternity Hospital to be known as the "After-Care Circle." They propose to conduct an educational campaign among mothers by employing nurses to visit the various homes for the purpose of instructing the mothers, and where the mothers are ill they will provide medical treatment.

Personal.—Dr. Edward A. Stapleton, Brooklyn, sailed for Europe, January 13.——Dr. Marguerite Darvas, New York City, has been appointed junior medical assistant in the Memorial Hospital, Worcester, Mass.——Dr. Sara Josephine Baker, head of the child hygiene work of the Department of Health who broke down with the work, is reported to be improving.——Dr. Albert Warren Farris, formerly president of the State Commission in Lunacy, has been appointed a resident physician of the Glen Springs, Watkins, and will assume his duties in February.

Social Service and the Hospitals.—At a meeting of social workers and hospital officials held at the New York Academy of Medicine, January 24, plans were formulated for a permanent conference on hospitals and social service in this City. The purpose of the conference is to stimulate the growth of social work departments in all the hospitals and to standardize the work of these departments after they have been established. Dr. John Winters Brannan, president of Bellevue and the Allied Hospitals, was elected permanent chairman of the conference.

Vote Down Vaccination Appropriation.—At a recent meeting of the aldermen of this city the finance committee recommended that $10,000 in special revenue bonds be issued to pay for the employment of special medical officers to visit the schools and tenements and vaccinate children. Alderman Dowling, the Tammany leader, opposed the resolution stating that he "objected to city doctors visiting the homes of the poor and scratching the arms of children in the tenements" and he added that he thought vaccination a fad anyway. The other Tammany men voted with Alderman Dowling and the appropriation could not be raised.

Old Landmark Disappears.—The old Mott Memorial at 64 Madison Avenue, a landmark which has figured in the medical and surgical history of New York City for nearly half a century, was sold at auction February 1. The Memorial was founded in 1866 by the widow of the late Dr. Alexander Mott. It contained mementoes of the life of Dr. Mott and a library of more than 4,000 volumes, exclusively on medical and surgical topics, which were consulted freely by students and physicians. In the will of Mrs. Mott there was a provision that, in the event the property became burdensome, the trustees should sell it. After several years of uncertainty, the Memorial was closed in 1909, and the books, instruments and plates were transferred to the New York Academy of Medicine.

Aids Medical Research.—The New York Academy of Medicine has appointed a committee on public health, hospitals and budget, by the generosity of Mrs. E. H. Harriman. A trained statistician has been employed, who will carry on most of the

practical details of the committee's work. Among the duties of the committee are to organize a bureau to collect facts in regard to public health, sanitation and hygiene; to cooperate with all public health activities in the city; to advise the medical profession of current public health conditions; to give authoritative medical opinions on public health matters; to keep in close touch with city health officials; to hold public meetings and to give adequate publicity to the results of its researches.

Milk Tests Show Value of Pasteurization.—Dr. Wm. H. Park, in addressing the meeting of the committee of women's organizations on the milk question, described the results of observations conducted by the Rockefeller Institute for Medical Research as to the comparative health of 500 babies fed on five different qualities of milk. There were 100 babies, each fed on mother's milk, pasteurized milk, certified milk, ordinary dairy milk, or the poorest quality of milk obtained from grocers. The experiments demonstrated beyond question the superiority of mother's milk. The results from pasteurized milk were better than from certified milk, while the danger from the ordinary milk and the poorer qualities was shown in that seven deaths resulted during the summer months among babies fed on the poorer milk as compared with but one death in each of the other three classes.

OKLAHOMA

University Hospital Opened.—The new hospital of the State University School of Medicine, Oklahoma City, was opened with impressive ceremonies, January 17. The institution is the old Rolater Hospital, which has been leased by the state and to which three wings have been added and which has been entirely remodeled. The institution has accommodations for sixty patients.

Personal.—Dr. Joseph B. Rolater, Oklahoma City, in memory of the late Dr. William R. Pryor, New York City, has donated $500 to the New York Polyclinic Medical School and Hospital, and has erected a memorial tablet in the new building of the institution.——The state health employees made a Christmas present of a gold watch to Dr. John C. Mahr, Shawnee, state health commissioner.——Dr. James L. Shuler, Durant, was thrown from an automobile, January 21, dislocating his right shoulder.

New Officers.—Tillman County Medical Association, at Frederick, January 11: president, Dr. Francis E. Rosenberger, Grandfield, and secretary and treasurer, Dr. Lang A. Mitchell, Frederick.——Logan County Medical Association, at Guthrie, January 8: president, Dr. Louis A. Hahn, and secretary-treasurer, Dr. Ralph V. Smith, all of Guthrie.——Central Oklahoma Medical Association, at Enid, January 9: president, Dr. Sylvester N. Mayberry, Enid, and secretary, Dr. Walter M. Jones, Enid.——Washington County Medical Society, at Bartlesville, recently: president, Dr. George W. Woodring, and secretary, Dr. Wilbur E. Rammel, both of Bartlesville.——Oklahoma County Medical Association, at Oklahoma City, January 20: president, Dr. Arthur W. White, and secretary-treasurer, Dr. William R. Bevan, both of Oklahoma City.——First District Medical Society, at Shawnee, January 21: president, Dr. J. Asa Walker, Shawnee, and secretary-treasurer, Dr. William E. Licken, Oklahoma City.——Kay County Medical Society, at Ponca: president, Dr. William W. Lemmon, Nardin, and secretary, Dr. Roy E. Waggoner, Ponca (reelected).——Muskogee County Medical Society, at Muskogee, January 18: president, Dr. Harry T. Ballantine, and secretary-treasurer, Dr. Oscar C. Klass, both of Muskogee.——Grady County Medical Society, at Chickasha: president, Dr. Paul D. Vann, and secretary-treasurer, Dr. Martha J. Bledsoe, both of Chickasha.——Pittsburg County Medical Society, at McAlester: president, Dr. Richard K. Pemberton, Krebs, and secretary-treasurer, Dr. H. Earle Williams, McAlester (reelected.——Garfield County Medical Society, at Enid: president, Dr. Walter H. McKenzie, and secretary-treasurer, Dr. Frederic E. Diemer, both of Enid.

PENNSYLVANIA

New Organ of Medical Society.—The first issue of the *Journal of the Jefferson County Medical Society*, published monthly in the interest of the organized medical profession of the county, made its appearance January, 1912. It is an eight-page journal and contains the program of the meeting, the result of the election of officers, the president's message, synopsis of the papers read at the December meeting, list of non-members and news items.

Biddle Exonerated.—The special committee of the board appointed by the trustees of the Fountain Springs Hospital to investigate charges made by a number of Shamokin physicians against Dr. Jonathan C. Biddle, superintendent and surgeon in chief of the hospital, at its meeting at the hospital, decided that the charges were not preferred in good faith, as not one of those who preferred charges was present at the meeting. The committee reports that, if anything, the charges have placed the hospital and Dr. Biddle in a stronger position before the public.

Medical Staff Organizes.—The staff of Mercy Hospital, Johnstown, met January 4 and elected Dr. John B. Lowman, president, and Dr. Henry J. Cartin, secretary. The following staff members were elected: surgery, Drs. John B. Lowman and John L. Sagerson; medicine, Drs. Harry H. Penrod and Clarence B. Millhoff; ophthalmology, Dr. Olin G. A. Barker; laryngology, Dr. Charles E. Hays; diseases of children, Dr. Henry J. Cartin, and pathology and roentgenology, Dr. Frank Massey. Drs. Robert J. Sagerson and James M. Jefferson were elected assistant surgeons.

Personal.—Dr. James C. King, Reynoldsville, who was operated on in the Dubois Hospital, Pittsburgh, Dec. 31, 1911, for appendicitis, is reported to be convalescent.——Dr. Henry B. Walter has been appointed chief physician for the Pennsylvania System at Harrisburg, vice Dr. Eugene H. James, resigned.——Drs. George B. Kunkel and Harvey F. Smith have been appointed as associated surgeons for the Pennsylvania System at Harrisburg.——Dr. Edward R. Plank has been appointed city physician of Carlisle.——Dr. George F. Potteiger, Hamburg, has been appointed Major Medical Corps, N. G. Pa., and assigned to the Fourth Infantry, succeeding Major Morris F. Cawley, Allentown, deceased.

State Medical Bureau Will Demand That Students Attend Obstetric Cases.—The Bureau of Medical Education and Licensure held its first meeting, January 12, and fixed May 20, 21, 22 and 23 for examination of medical students who are about to be graduated, and May 24 for examination of students who have been studying for two years. The examinations will be held in Philadelphia and Pittsburgh. The bureau adopted a resolution that after January 1, 1913, it will require evidence from each candidate for a doctor's degree that he or she has attended at least six obstetric cases. Steps were also taken by the board toward obtaining reciprocity with other states in the matter of physicians' licenses, and the secretary of the board was instructed to prepare books for registering all medical practitioners in the state, as required by the act creating the new bureau. The medical colleges, six in Philadelphia and one in Pittsburgh, will be inspected by the board, February 12-16.

New Officers.—Franklin County Medical Society, at Chambersburg, January 16: president, Dr. Frank N. Emmert, Chambersburg; secretary, Dr. John J. Coffman, Scotland.——Lycoming County Medical Society, at Williamsport, January 12: president, Dr. Edward Lyon, Jr.; secretary, Dr. Clarence E. Shaw (reelected), both of Williamsport.——Luzerne County Medical Society, at Wilkes-Barre, January 11: president, Dr. Clarence W. Prevost, Pittston, and secretary-treasurer, Dr. Delbert Barney, Wilkes-Barre.——Bradford County Medical Society, at Sayre, January 9: president, Dr. John E. Everett, Sayre, and secretary, Dr. Cyrus L. Stevens, Athens.——Chester County Medical Society, Dr. John A. Farrell, West Chester, president, and Dr. Joseph Scattergood, West Chester, secretary (reelected).——Northumberland County Medical Society, at Sunbury, January 5: Dr. Charles H. Swenk, Sunbury, president, and Dr. Horatio W. Gass, Sunbury, secretary and reporter (reelected.——Lackawanna County Medical Society, at Scranton, January 9: president, Dr. William Rowland Davies, Scranton, and secretary, Dr. F. Whitney Davis, Scranton.——Lehigh County Medical Society, at Allentown, January 9: president, Dr. George F. Seiberling; secretary, Dr. Jacob Treichler Butz, both of Allentown.——Lehigh Valley Medical Society, at Easton, January 4: president, Dr. William A. Seibert, Easton, and secretary, Dr. S. Clarence Swartz, Allentown.——Lebanon County Medical Society, at Lebanon, January 9: president, Dr. Samuel P. Heilman, Heilmandale, and secretary, Dr. Charles M. Strickler, Lebanon.——Indiana County Medical Society, at Indiana, January 9: president, Dr. Benjamin F. Coe, Dixonville, and secretary, Dr. Charles E. Rink, Shelocta.——York County Medical Society, at York, January 4: president, Dr. Joseph H. Bittinger, Hanover, and secretary-reporter, Dr. Julius H. Comroe, York.——Montgomery County Medical Society, at Norristown, January 4: president, Dr. George F. Hartman, Port Kennedy, and secretary, Dr. H. H. Whitcomb, Norristown.——Schuylkill County Medical Society, at Schuylkill Haven, January 2: president, Dr. George R. S. Corson, Pottsville, and secretary, Dr. George O. O. Santee, Cressona.——Allegheny County Medical Society, at Pittsburgh, January 9: president, Dr. Theodore Diller, and corresponding secretary,

Dr. Sidney A. Chalfant, both of Pittsburgh.——Jefferson County Medical Society: president, Dr. John H. Murray, Punxsutawney, and secretary-treasurer, Dr. Norman C. Mills, Big Run.

Philadelphia

Personal.—Dr. Leonard D. Frescoln, late assistant chief resident physician at the Philadelphia General Hospital, has been elected chief resident physician at the Episcopal Hospital.——Dr. William L. Rodman has been elected to fill the vacancy in the directorate of the Philadelphia County Medical Society, caused by the election of Dr. Levi J. Hammond to the presidency.

Hospital to Honor Lincoln.—James Doak, a contractor, has had placed in his hands plans for a $50,000 building that is to be erected on the site of the Mercy Hospital and School for Nurses at Seventeenth and Fitzwater Streets, as a memorial to Abraham Lincoln. The first shovelful of dirt will be excavated on Lincoln's birthday, February 12, 1912. In order to start this new building, the hospital has asked aid of the public through the *Public Ledger*.

Phipps Hospital Conveyed to University.—Henry Phipps, of Pittsburgh, has conveyed to the trustees of the University of Pennsylvania, the large hospital now being erected at the northeast corner of Seventh and Lombard Streets, to be known as the Phipps Institute for the Study and Treatment of Tuberculosis. The property was conveyed for a nominal consideration, subject to a irredeemable ground rent on one of the lots of $60. The hospital building, nearing completion, occupies a lot with a frontage of 143 feet on Lombard Street, and a depth to Addison Street of 153 feet. The cost of the building will be about $300,000. It is endowed in addition by the donor, the whole project representing about $1,000,000.

Public School Physicians Chosen.—On January 16, Dr. Joseph S. Neff, Director of Public Health and Charities, made a provisional appointment of fifty-five medical inspectors for the public schools, to serve pending the examination and rating of 400 applicants for the positions. Those who were temporarily appointed reported to Dr. Walter S. Cornell on January 17 and commenced at once the inspection of school children. The examinations of the 400 candidates for the permanent appointments were held January 20, under the supervision of a board of physicians named by Dr. Neff, as follows: Dr. Charles Lincoln Furbush, president; Dr. Ward Brinton, Dr. William E. Hughes, Dr. J. Leslie Davis and Dr. Elizabeth L. Peck.

New Officers.—Philadelphia County Medical Society, January 17: president, Dr. Levy J. Hammond, and secretary, Dr. William S. Wray.——North Branch: chairman, Dr. Jesse O. Arnold, and clerk, Dr. John Bernhard Mencke.——South Branch: president, Dr. John D. McLeron; clerk, Dr. Paul B. Cassidy.——Kensington Branch: Dr. Joseph W. Moore, chairman, and Dr. William P. Grady, clerk.——Germantown Branch: Dr. George A. Cameron, chairman, and Dr. J. Paul Austin, clerk.——Southeast Branch: Dr. Aaron Brav, chairman, and Dr. Maurice B. Cooperman, clerk.——Northern Medical Association, January 12: president, Dr. Paul F. Bremer, and secretary, Dr. Lee Boyce.——Philadelphia Medical Club: president, Dr. S. Lewis Ziegler, and secretary, Dr. William S. Wray.——West Philadelphia Medical Association: president, Dr. A. Wiese Hammer, and corresponding secretary, Dr. Henry G. Munson.——Pathological Society of Philadelphia, January 11: president, Dr. Allen J. Smith, and secretary, Dr. Oliver H. Perry Pepper.——Philadelphia Neurological Society: president, Dr. John H. W. Rhein, and secretary, Dr. George E. Price.——Section on Otology and Laryngology of the College of Physicians of Philadelphia: chairman, Dr. Arthur A. Bliss, and clerk, Dr. Ralph Butler.——Wills Hospital Ophthalmic Society: chairman, Dr. William Zentmayer, and secretary, Dr. Burton Chance.——Philadelphia Medical Examiners' Association: president, Dr. A. T. Gaillard, and secretary, Dr. John Lawrence Eisenberg.

RHODE ISLAND

Plans for Centennial.—Extensive plans are being made for the centennial celebration of the Rhode Island Medical Society, which will take place in Providence, June 12 and 13, and during which the new library building, which has been erected at a cost of more than $30,000, will be dedicated. On the first day there will be an excursion down Narragansett Bay and in the evening a public reception will be held in the new library building. The exercises of the second day will include clinics in the morning at the Rhode Island, City and St. Joseph's hospitals, after which the president, Dr. Frederick T. Rogers, will entertain the delegates. At the public meeting in the afternoon Dr. Abraham Jacobi, president-elect of the American Medical Association, will deliver an address and the regular business session will be held. The proceedings will close with a banquet given at the Eloise in the evening.

TENNESSEE

New Hospital.—A new hopital was opened in McMinnville, Tenn., January 1, known as the Cooperative Infirmary. It is a semi-public institution, built and operated by Dr. Thomas O. Burger.

Interest Growing in New Hospital.—The Galloway Memorial Hospital movement is exciting great interest in Nashville. The medical faculty of Vanderbilt University has been made into one committee of physicians, with Dr. William L. Dudley, Nashville, the dean, as its chairman. Up to the present time $46,045 has been subscribed of the $150,000 required.

Permanent Home for Society.—It is promised that permanent quarters are to be furnished for the Hamilton County Medical Association and the Chattanooga Academy of Medicine in a new business block to be erected in the center of the city at an early date. A medical library will be installed and rooms will be furnished for meetings and for social purposes.

New Officers.—The Chattanooga Academy of Medicine and Hamilton County Medical Society, at Chattanooga, Dec. 29, 1911: president, Dr. Frank Trester Smith, and secretary-treasurer, Dr. Hampton L. Fancher, both of Chattanooga.——Greene County Medical Society, at Greenville, January 8: president, Dr. Horace M. Taylor, Greenville, and secretary, Dr. Martin A. Blanton, Baileyton.——East Tennessee Medical Society, at Morristown: president, Dr. T. E. Bales, Morristown, and secretary-treasurer, Dr. William E. Howell, Morristown.——Phi Chi Medical Fraternity, at Chattanooga: president, Dr. J. C. Brooks, and secretary-treasurer, Dr. Miles D. Davis.——Memphis and Shelby County Medical Society, at Memphis: president, Dr. William T. Black, and secretary-treasurer, Dr. Buford N. Dunavant (reelected), both of Memphis.——Sumner County Medical Society, at Gallatin: president, Dr. Bruce S. Galbraith, Hendersonville, and secretary-treasurer, Dr. Walter S. Dotson, Gallatin.——Jefferson County Medical Society, at Jefferson City: president, Dr. William L. Tadlock, Talbott, and secretary, Dr. Buford M. Tittsworth, Jefferson City.

WISCONSIN

State Society Meeting.—The date for the meeting of the Wisconsin State Medical Society is fixed for May 22-24 at Wausau.

Prohibits Common Drinking-Cups.—A rule issued by the State Board of Health, January 8, prohibits the use of common drinking-cups in public buildings.

Nitrate of Silver on Free List.—Nitrate of silver has been added to the list of free supplies given to the poor by the health department of Milwaukee. It is to be used for the prevention of ophthalmia neonatorum.

The Travelers.—Dr. and Mrs. Norman P. Mills, Appleton, have started on a trip to Florida Keys and Cuba.——Dr. and Mrs. William E. Minahan, Fond du Lac, sailed for Europe, January 20.——Dr. Frank F. Newell, Burlington, has returned from Europe.

Damage by Fire.—The residence of Dr. John R. Minahan, Green Bay, was destroyed by fire, January 15, with a loss estimated at $20,000, partially covered by insurance.——A fire at Hilbert, January 10, destroyed the barn of Dr. Charles F. Lawler, with a loss of $1,500.

Medical Staff Resigns.—The entire medical staff of the Social Workers' Tuberculosis Sanatorium, Keefe Avenue, Milwaukee, consisting of Drs. Alfred N. Baer, Milton M. Spitz, Sidney H. Wetzler, Adolph G. Beyer, Arthur J. Patek, William H. Washburn, Harry Greenberg, David H. Lando, Maurice Altman, Joseph Kahn, Lewis G. Nolte, Thomas C. Phillips and Carl Holty resigned in a body, January 24, it is alleged, because they were not consulted in the appointment of the chief of staff.

Personal.—Dr. Russell J. C. Strong, Beloit, assistant physician at the State Tuberculosis Sanatorium, Wales, has resigned and will practice in Milwaukee.——Dr. William H. Bartram, Jr., Green Bay, has been appointed local surgeon for the Green Bay and Western Railroad.——Dr. E. H. Mensing has been appointed first assistant coroner of Milwaukee County, vice Dr. Robert O. Friedrich, resigned.——Dr. Maurice Altman has been appointed deputy coroner of Milwaukee County, vice Dr. Arthur F. Reitman, deceased.——Dr. Thomas R. Hastings, Limeridge, has purchased and remodeled the new Commercial Hotel, Reedsburg and will open it as a sanatorium.

New Officers.—Portage County Medical Society, at Stevens Point, January 23: president, Dr. John D. Lindores, and secretary and treasurer, Dr. Wayne F. Cowan, Stevens Point.——Brown County Medical Society, at Green Bay, January 18: president, Dr. Thomas J. Oliver, and secretary-treasurer, Dr. Isaac E. Levitas, both of Green Bay.——Superior Clinical and Social Society, January 15: president, Dr. Henry A. Russell, and secretary-treasurer, Dr. Charles D. Conkey.——Milwaukee Medical Society, January 12: president, Dr. Horace M. Brown, and secretary, Dr. Clarence A. Baer.——Manitowoc County Medical Association, at Manitowoc, January 10: president, Dr. John E. Meany, and secretary-treasurer, Dr. Adolph J. Shimek, both of Manitowoc.——Washington County Medical Society, at West Bend: president, Dr. Willibald J. Wehle, West Bend, and secretary-treasurer, Dr. Sylvester J. Driessel, Barton (reelected).——Dane County Medical Society, at Madison, January 25: president, Dr. Joseph F. Dean, and secretary-treasurer, Dr. Charles S. Sheldon, both of Madison.——Rock County Medical Society, at Janesville: president, Dr. William J. Allen, Beloit, and secretary-treasurer, Dr. Edwards B. Brown, Beloit.——Ashland County Medical Society, at Ashland, January 13: president, Dr. Adellon P. Andrus, and secretary, Dr. John M. Dodd, both of Ashland.——Wood County Medical Society, at Marshfield, January 17: president, Dr. Jean A. Jackson, Rudolph, and secretary, Dr. James B. Vedder, Marshfield.——Grant County Medical Society, at Fennimore, January 11: president, Dr. William P. Hartford, Cassville, and secretary-treasurer, Dr. Mina B. Glasier, Bloomington.——Racine County Medical Association, at Racine, January 22: president, Dr. Walter S. Haven, and secretary-treasurer, Dr. Susan Jones.

GENERAL AND FOREIGN

Chattahoochee Physicians Meeting.—At the annual meeting of the Chattahoochee Valley Medical and Surgical Association held in La Grange, Ga., January 17-18, Dr. George M. Niles, Atlanta, Ga., was elected president; Dr. O. Velpeau Langley, Camp Hill, Ala., vice-president, and Dr. William J. Love, Opelika, Ala., secretary and treasurer. The next meeting will be held in Atlanta in July.

Personal.—Dr. Victor G. Heiser, Manila, director of health for the Philippine Islands and chief quarantine officer, has returned after a trip around the world.——Dr. Wiley E. Woodbury, Ionia, Mich., formerly of Detroit, has been appointed superintendent of the Philippine General Hospital, Manila, P. I.——N. C. Comfort, for two years superintendent of the Philippine General Hospital, Manila, P. I., resigned and has been made disbursing officer of the Quarantine and Marine-Hospital Service, in the same city.——Drs. Benjamin Burdette and Donald Gregg have been appointed surgeon and physician, respectively, at the University Hospital, Manila, vice Dr. A. M. Saleeby, who is about to open a private hospital.——General A. C. Girard, M. C. U. S. Army, retired, who was seriously injured two weeks ago by a fall on the ice, and was a patient at the Walter Reed Hospital, Washington, has returned home convalescent.

Congress for the Protection of Infants.—Nathan Straus, New York City, in his report to the President of the United States, as delegate to the Third International Congress for the Protection of Infants, noted the keen interest taken by the Empress of Germany in the efforts being made in the United States to protect the lives of infants and in the efficient work that is being done by the government to promote the public health. Mr. Straus made a report to the congress on "The Progress Made in America in the Protecting of Child Life" and also submitted a paper on "Twenty Years' Experience in Modifying and Pasteurizing Milk for Infant Feeding." He found that Drs. Walter Wyman and Milton J. Rosenau were regarded abroad as typical of authority and progress and as putting America in the very front rank in the nations that are seriously grappling with the problems of the prevention of disease. The news of the death of Surgeon-General Wyman was received with genuine grief in foreign health offices and his absence from his sphere of beneficent activity was regarded as a calamity to the world at large. What most impressed Mr. Straus was the vital importance of directing the attention of the world at large and of the health officers of cities and nations to the duty of preventing disease. America, he states, is in advance of the times, having in Harvard University the only scholastic department in the world devoted to the prevention of disease. He suggests that the President call an International Congress for the Prevention of Disease and believes that by calling together the great sanitarians, health officers and others identified with the work of prevention of disease rich blessings would be brought on the world.

Calleja's Golden Jubilee.—The dean of the medical department of the University of Madrid, Professor J. Calleja, was recently tendered a banquet and ovation in honor of the fiftieth anniversary of his entering on his medical career—as the *Siglo Medico* expresses it, his *bodas de oro con la profesion.* He is professor of anatomy and was the president of the XIV International Medical Congress held at Madrid in 1903.

The Quack Portrayed in the Drama.—*Münchener medizinische Wochenschrift* states that Dr. A. E. Thiele of Chemnitz, Germany, has written several popular plays and in his latest, the "Ahrsdorfer Frau," recently produced in a local theater, he subtly holds up to ridicule the practices of a charlatan with the eventual enlightenment of his clientèle, as the background to an entertaining little drama.

Severe Typhoid Epidemic in Spain.—There have been more than 2,500 cases of typhoid or typhus at Gigon, a town in the northwest of Spain, and daily for weeks from twenty to twenty-seven persons died. A flying sanitary squadron, in charge of Dr. Bejarano, was despatched in December, and advices received since from him report that days pass now without a death. The *Siglo Medico* states that the lay local and provincial press has contained no reference to the epidemic.

LONDON LETTER

(From Our Regular Correspondent)

LONDON, Jan. 20, 1912.

The National Insurance Act.

The British Medical Association Reform Committee (THE JOURNAL, Jan. 27, 1912, p. 288) has issued a manifesto to the medical profession in general and to the members of the British Medical Association in particular, in which it is stated that the committee exists solely for the purpose of enforcing the avowed policy of the British Medical Association in contradistinction to the weakened version thereof expressed in the circular letter to the representatives (in which the policy of working the act and the endeavor to obtain those of the six points not granted in it by local regulations were set forth). The reform committee will continue to exist only until the interests of the medical profession under the national insurance act are adequately safeguarded without evasion, equivocation or reservation of any kind. The committee thinks that the best method of obtaining this end is by the promotion of an act of Parliament, through the British Medical Association, amending the act so as to embody the six points. The committee also alleges that in the negotiations with the government, the council allowed itself to be too much influenced by political considerations and by so doing has endangered the interests of the profession, and that "ending or mending" the present council is the only method by which the confidence of the members of the association in their official leaders can be restored. To reform the council, the committee suggests the enrolment in the reform committee of a sufficient number of members from each division and branch of the association to ensure that a representative be returned to the representative body and to the council who shall be in sympathy with, and will pledge himself to vote for, the policy laid down by the committee. It also suggests the establishment in London of an executive committee, composed of delegates of divisions, to control the business and finances of the reform committee. The committee is of the opinion that every member of the profession should be a member of the British Medical Association and will do its best to obtain new members, as well as to urge present members to continue in the association. In criticism of this manifesto, it may be pointed out that the request to the government for an amending act, such as is described, is hopeless, for the medical profession has very little power in politics, except advising in sanitary legislation. As a matter of fact, the council of the association did its best to obtain the six points and did obtain as many as could possibly be obtained by negotiation with the government. The allegation that they were influenced by political considerations is absolutely unfounded and is simply due to political malice, which is covertly entering into the agitation against the council. It is given some verisimilitude by the fact that the most prominent and strongest member of the council, Sir Victor Horsley, is a supporter of the government and the radical candidate for one of the London constituencies. To political opponents, with certain sorts of minds, this is sufficient for the aspersion that he would allow his political views to influence him in dealing with the act. But the truth is that he has always supported the profession in its demands. Indeed, it was through his instrumentality that the constitu-

tion of the British Medical Association was altered so as to give the rank and file a real controlling power. Further, it happens that he has taken no part, whatsoever, in the negotiations with the government. Finally, two-thirds of the council are conservatives, and therefore, opponents of the government, and if influenced by political considerations, these must have been hostile to the government, not favorable, as alleged. This introduction of political feeling into the question is doing much harm by tending to divide the profession, which necessarily contains members of both parties. If general politics have been introduced it is by the accusers, who are only imagining of their opponents motives which, consciously or unconsciously, influence themselves. On the other hand, some of the most outspoken and uncompromising denunciations of the act have come from physicians who are political supporters of the government.

The International Congress of Medicine

Arrangements are now complete for the International Congress of Medicine which is to be held in London from Aug. 6 to 12, 1913. The program of the congress and its various sections, including the arrangements for general meetings and for the general discussions in the sections, will be published not later than Sept. 30, 1912, and will be forwarded to all those who shall have at that time inscribed themselves as members. An appeal will soon be made to the profession for funds to meet the necessary expenses of the organization which it is estimated will not be less than $90,000, exclusive of the subscriptions of members. The president of the congress is Sir Thomas Barlow, F. R. S. The secretary-general is W. P. Herringham. Regular graduate physicians are eligible to membership in the congress on payment of the fee ($5), which should be sent to the treasurers, Seventeenth International Congress of Medicine, 13 Hinde Street, London, W., with designation of the section in which the member desires to register. Scientists nominated by their national committees or by the executive committee are eligible on the same terms. The advantages of the congress are extended to the wives and daughters of members on payment of half the fee. Information with regard to reduced railway rates, lodgings, excursions, etc., will be published up to April 30, 1913. The sections are (1) anatomy and embryology; (2) physiology; (3) general pathology and pathologic anatomy (subsection, chemical pathology); (4) bacteriology and immunity; (5) therapeutics; (6) internal medicine; (7) surgery (subsections, orthopedics and anesthesia); (8) obstetrics and gynecology; (9) ophthalmology; (10) pediatrics; (11) neuropathology; (12) psychiatry; (13) dermatology and syphilography; (14) urology; (15) rhinology and laryngology; (16) otology; (17) stomatology (18) hygiene; (19) legal medicine; (20) army and navy sanitary service; (21) tropical medicine; and (22) radiology.

PARIS LETTER

(From Our Regular Correspondent)

PARIS, Jan. 19, 1912.

The International Sanitary Conference

The International Sanitary Conference which opened November 7, last, has just closed its sessions. It was convoked on the initiative of the French government to revise the convention of 1903 to prevent the invasion and the propagation of plague, yellow fever and cholera and brought together official delegates from forty-one countries. The United States was represented by Dr. H. D. Geddings, of the Public Health and Marine-Hospital Service, and Dr. Jefferson R. Kean, lieutenant-colonel in the Army Medical Corps.

The three subjects under consideration were distributed among three special commissions who took them up both from the technical point of view and that of ways and means. Then an editing committee was charged with codifying all the desiderata on which the general sessions had established an agreement.

Dr. A. Calmette, professor of hygiene and bacteriology at the Faculté de médecine de Lille read the report on plague. It is admitted that the period of incubation of this disease in man does not exceed five days. Consequently, persons who have been in contact with patients should be submitted simply to observation for not over five days. They present no danger if they do not harbor biting and sucking parasites.

The report on cholera was presented by Dr. Van Ermengem, professor of hygiene and bacteriology at the medical school of Ghent. The most delicate question on the program of the cholera commission was that of the rôle of germ-carriers in the distribution of cholera and the practical importance, with regard to prophylaxis, of their detection. The conclusion of the report is that in the present state of our knowledge it is difficult to ascertain the amount of danger to the public in the carriers of cholera germs. It is probable that they play an important rôle in the development of local epidemics but no authentic instance has been reported of the transportation of cholera to a great distance by germ-carriers. It is therefore agreed that the detection of germ-carriers is among the most important prophylactic measures in the interior of a country at the beginning and during the course of epidemics. In international prophylaxis, however, generally speaking, it is impossible to pay much attention to isolated germ-carriers. The detection of germ-carriers seems indicated on maritime frontiers in the case of ships which have cholera on board or have had it during their voyage, and on land frontiers among travelers who have associated with cholera patients.

Dr. A. Agramonte of Havana, chairman of the commission on infectious diseases, reported on yellow fever. The conference endorsed the principal measures prescribed by the convention of Washington in 1905. The patients should be considered infectious only during the first four days of the disease. Ships going to yellow fever countries should be treated so as to give as little shelter as possible to the *Stegomyia*. The *Stegomyia* may practically be destroyed on board the ships by sulphur fumigation.

The Association of Anatomists and the Disturbances at the Medical School

The minister of public instruction has decided to close the Faculté de médecine to the students of the first and second years until the end of the first semester of the school year.

The Association des anatomistes has just addressed to the minister a protest against the actions of the first- and second-year medical students, expressing surprise at the assurance of these beginners in declaring the professor to whom they will not listen incompetent to instruct them, whereas the Association des anatomistes, which includes nearly all the scientific anatomists in France and French-speaking countries, as well as distinguished anatomists throughout the entire world and the majority of the professors of the medical schools, and which might seem qualified to pronounce judgment on Dr. Nicolas' qualification, has been willing to have him for its perpetual secretary as long as it has existed, that is, more than fourteen years. This protest bears 150 signatures.

Reversal of the Decision Against Dr. Bazy

A little over a year ago the civil court of the Seine condemned Dr. Bazy, surgeon of the hospitals, to pay $1,000 (5,000 francs) damages, for having left two compresses in the abdomen of a woman on whom he operated for an ovarian cyst (THE JOURNAL, Jan. 14, 1911, p. 130). The Paris court of appeals has just reversed this decision on the ground that the patient owes her life to Dr. Bazy and that moreover there is no proof that Dr. Bazy committed the professional fault with which he is charged.

Physicians in the French Senate

January 7, elections were held to fill 100 senatorial seats. Among those elected were sixteen physicians, of whom eleven were reelected and five are new members.

Death of Dr. Leven

Dr. Manuel Leven has just died, aged 81. He was head physician of the Rothschild Hospital of Paris. He published several works on diseases of the stomach in which he emphasized the influence of the nervous system.

Has the Attending Physician a Right to Fees for His Presence at an Operation?

A decision which seems to be the first rendered on the subject has just defined the rights of the physician in charge of a case of being present in a *maison de santé* at an operation and the fees that he should receive for this. A physician had included in his bill the sum of $20 (100 francs) for having been present at an operation on the patient (a child) and $32 for having visited him eight times after the operation. The patient's father maintained that he had never asked the physician to be present at the operation or to visit the patient at the *maison de santé*. The court decided that it was customary for the physician to be present at an operation that he had advised, but that the sum of $10 was considered sufficient to remunerate the physician who took no active part in the operation; and that the physician had no right to fees for his visits after the operation unless he had been requested to make them by the patient or the surgeon.

BERLIN LETTER

(From Our Regular Correspondent)

BERLIN, Jan. 12, 1912.

Personal

In place of Professor Uhthoff, Professor Hess of Würzburg has received a call as director of the eye clinic of the University of Berlin.

Professor Rubner, director of the Berlin hygienic institute, has received the large gold Rinecker medal of the University of Würzburg.

Professor Franqué has accepted the call to the chair of gynecology in Bonn as successor of Professor Fritsch.

Professor Heusner, for many years the able director of the surgical department of the municipal hospital of Barmen will retire April 1, on account of his advanced age.

The Fatalities in the Municipal Lodging-House

During the last week the origin and extent of the wholesale sickness at the municipal lodging-house has been the subject of discussion in three medical meetings. The first was held in the department of the interior and all physicians took part who had anything to do with the treatment of the sick and with the examination of the bodies. The two other discussions were in the internal medicine society (Verein für innere Medizin), on January 8, following an address by the well-known medical jurist, Professor Fritz Strassmann, and on January 10 in the Berlin medical society (Berliner medizinische Gesellschaft), in connection with an address by Professor Stadelmann, the director of the internal department of the hospital Friedrichshain, where most of the patients were received. As the result of this entire discussion which was in part extensive, it appears that the first cases of illness and death occurred December 26 of last year and the last January 2 of this year. In all there were 161 cases of illness and sixty-seven deaths, a mortality of 41 per cent. The clinical picture was uniform, only being more or less pronounced according to the severity of the illness. All the patients showed nausea, severe thirst, faintness, weakness in the legs, headache, fixity of the pupils and frequently disturbances of vision. Death occurred with great dyspnea. The necropsies gave insignificant findings. The patients were all of the male sex and with few exceptions inmates of the municipal lodging-house. There is little doubt that the wholesale illness depended on a poisoning and not on a communicable disease, and that the source of the poison was to be sought outside of the lodging-house. There was reason for the assumption of a poisoning by decomposed food, particularly smoked fish or sausages of horse meat, because a large proportion of those first taken ill had previously eaten fish or sausages. This assumption was the more probable as the symptoms were very similar to those produced by decomposed foodstuffs (Botulismus), and because the animal experiments instituted in the Institut für Infektionskrankheiten showed a powerful toxic action of the stomach contents and of the blood-serum of the patients, and because the poison lost its activity on the application of an antibotulismus serum. But before this investigation was concluded, the chemical experts of the police department found in the whiskey of a saloon where the men of the shelter resorted in great numbers, a large amount of methyl alcohol and ascertained that this and some other saloons in the neighborhood of the lodging house had obtained whiskey adulterated with methyl alcohol from a druggist who, as an investigation showed, had sold a large stock of methyl alcohol in place of the more expensive alcohol for drinking. The police authorities ascertained who were the customers of the druggist and either closed their shops or confiscated their stock of whiskey. The suspicion that the wholesale poisoning depended on the use of whiskey containing methyl alcohol was confirmed by the examinations which showed that the remains of the smoked fish and of the sausages which were found in the lodging-house contained no poison. Moreover methyl alcohol was demonstrated in the stomach contents of the patients. Further the symptoms in the poisoned individuals corresponded with those which have been exhibited in some wholesale poisonings by methyl alcohol which have been observed of late years in America, Russia and Hungary. In Germany similar cases have never been observed before. Interesting facts with regard to the causation of blindness were brought out by Professor L. Pick, the prosector of the municipal hospital at Friedrichshain, in the Berlin medical society. According to him in some cases there was a granular degeneration of the ganglion cells in the retina with a swelling of the fibrils of the optic nerve, both in the papilla and in the course of the nerve, changes which are entirely sufficient to explain the severe disturbance of function.

Which poison in the last analysis caused the wholesale intoxication remains for further investigation to determine. Both from the animal experiments, on which Dr. Wolff-Eisner has reported, as well as from the opinions of authorities, such as Professor Zuntz, there is a justifiable doubt whether methyl alcohol as such played the principal rôle.

Annulment of a Requirement for Cremation

Among the points to be decided according to the ministerial decree, before a permit is granted for cremation of a corpse, is one which requires that in the case of female bodies, a careful examination of the hymen shall be made. This requirement has aroused a vigorous protest, especially among women. It is urged that this requirement might injure extremely a woman's reputation, that it is purposeless from a legal and medical standpoint, that the determination of the virginity of a woman is impossible for the conscientious physician, and that by the insertion of a report of this sort in the death certificate, opportunity would be afforded for much gossip. Against this demand it was urged that the examination of the female genitals cannot be avoided in the regular inspection, since the burning of the body might obliterate most imoprtant changes for ever. Apart from cases of poisoning which have occurred through the vagina, deaths from criminal abortion are particularly important. Since physicians often have a part in these crimes, there would be danger that they would very willingly consent to a certificate for permission to cremate in order to conceal the traces of their crime. Finally, as far as the determination of virginity is concerned, it is essential, particularly in children, in order to exclude the occurrence of rape. That injury to the sentiments of the survivors may be occasioned by such an examination cannot be denied, but the official inspection of the body would be held in the absence of the relatives, so that this objection is of little moment. In all medicolegal necropsies the same investigation is made without raising any objection. In spite of these reasons, the minister decided to refer the matter to the highest scientific medical authorities in Prussia, the Wissenschaftliche Deputation für das Medizinalwesen, and after the deputation decided against the necessity of determining whether virginity is present or not, the requirement in question was abolished.

Determination of Myopia in the Higher Schools

A thorough investigation of the extent of myopia in the higher schools of Prussia has been ordered by the minister of education. Privat-docent Dr. Kraus, assistant of the eye clinic of the Charité in Berlin, has been entrusted with the carrying out of this investigation according to a special plan of examination.

A Weekly Review of Internal Medicine to be Issued Officially by the Organized Internists of Germany

In the latter part of January a *Zentralblatt für die gesamte innere Medizin und ihre Grenzgebiete* will appear, from the publishing house of J. Springer in Berlin, as the official organ of the German congress for internal medicine. The *Zentralblatt* is to be under the constant supervision of a committee appointed by the congress, which for the present consists of Prof. His of Berlin, Prof. v. Müller of Munich, Prof. v. Noorden of Vienna and Prof. Schwalbe of Berlin. It is to be edited by Dr. von Domarus, a former assistant of Prof. v. Müller and it is intended to present every week abstracts of all the publications worthy of notice, both in domestic and foreign literature, covering the entire field of internal medicine. Original articles will not appear in the *Zentralblatt*. An organ of this sort exclusively for internal medicine has not existed so far in the literature of the world.

Departure of the German Expedition of the Red Cross

The expedition of the German Red Cross intended for the support of the Turkish Red Crescent (Roter Halbmond) left Germany, January 10. It is under the leadership of Professor Goebel, the Breslau surgeon. The term of service is planned for three months.

Memorial Exercises

The laryngological society has arranged a memorial for its lately deceased honorary president, Prof. Bernhard Fraenkel, and the ophthalmologic society will similarly hold a memorial of Professor von Michel, who was for many years its chairman.

Marriages

ERNEST WILFRED INGLE, M.D., Cape Town, South Africa, to Miss Eda Hankins of Claremont, South Africa, at Takoma Park, Washington, D. C., January 1.

RUDOLPH B. WATSON, M.D., Ancon, Canal Zone, Panama, to Miss Rachel V. Hicks of Roslyn, L. I., New York, at Ancon, January 15.

WALTER L. BARBOUR, M.D., to Miss Barbara De Lange, both of Marmarth, N. Dak., at Aberdeen, S. Dak., January 9.

MARY REBECCA BAKER, M.D., Columbia, S. C., and R. Golding Blackburn, M.D., of Whitmire, S. C., Sept. 6, 1911.

SHERMAN J. JONES, M.D., Hastings, Neb., to Miss Georgiana Wright of Portland, Ore., in Omaha, January 11.

GEORGE FREDERICK SORGATZ, M.D., Springfield, Ill., to Miss Katherine Wyth of Cedar Falls, Ia., recently.

CHARLES S. STOAKES, M.D., Battle Creek, Ia., to Miss Margaret H. Wolfram, at Sharon, Wis., recently.

JULIAN RAYMOND BLACKMAN, M.D., Baltimore, to Miss Louie Ninita Ferris of Hastings, Neb., January 11.

CHARLES MCRAE MORGAN, M.D., Camden, Ark., to Miss Ethel McKay of Monticello, Ark., January 17.

LUTHER OAKES WHITMAN, M.D., to Miss Adelaide Luby, both of San Antonio, Tex., January 17.

GUSTAV A. HEIDNER, M.D., to Miss Anna E. Butzke, both of West Bend, Wis., January 13.

HERMAN HELLENSTEIN, M.D., to Miss Irene Adler, both of New York City, January 11.

JOSEPH M. TRIGG, M.D., to Miss Emma May O'Bar, both of St. Louis, Dec. 30, 1911.

Deaths

John Augustus Lamson, M.D. Harvard Medical School, 1856; surgeon of the Forty-Second Massachusetts Volunteer Infantry during the Civil War; for two terms a member of the Massachusetts Volunteer Infantry during the Civil War; for two terms a member of the Massachusetts Legislature and for ten years a member of the Boston School Board; who was made chief medical inspector for Boston for the Equitable Life Insurance Company in 1880 and retired from general practice eighteen years later; died at his home in Boston, January 16, from senile debility, aged 80.

Gilbert Christian Greenway, M.D. University of Maryland, Baltimore, 1868; a member of the American Medical Association and one of the oldest and most-respected practitioners of Hot Springs, Ark., where he had practiced since 1874; died at his home in that city, January 19, from heart disease, aged 71. At a called meeting of the Garland County-Hot Springs Medical Society, January 19, resolutions of sorrow and respect were adopted and a number of the members of the society acted as honorary pallbearers at the funeral.

Friend W. Shaffer, M.D. Castleton (Vt.) Medical College, 1850; for more than fifty years a practitioner of Fulton County, N. Y., and formerly health officer, coroner and president of the medical board; at one time president of the Fulton County Medical Society and a life member of the Medical Society of the State of New York; until seven years ago a practitioner of Gloversville; died at the home of his son in Syracuse, January 10, from senile debility, aged 89.

Henri Benton Cole, M.D. New York University, New York City, 1860; assistant surgeon of the One Hundred and Twenty-Eighth New York Volunteer Infantry throughout the Civil War; medical director of the department of medicine of the Grand Army of the Republic in 1893-94; mayor of Black River Falls, Wis., for several terms; chairman of the Jackson County board of education and coroner; died at his home, January 14, aged 73.

Thurston Smith, M.D. College of Physicians and Surgeons, Chicago, 1899; once president of the Monroe County (Ind.) Medical Society; contract surgeon in the Army in 1900-03 with Philippine service and captain and assistant surgeon of United States Volunteers; died at his home in Bloomington, Ind., January 6, aged 45.

Bailie Brown, M.D. National Medical University, Chicago, 1897; Eclectic Medical College of the City of New York, 1900; died at his home in Jersey City, N. J., January 12, from pernicious anemia, aged 42.

John M. Stucky, M.D. University of Louisville, Ky., 1848; a member of the Kentucky State Medical Association; for more than sixty years a practitioner of Gosport, Ind.; assistant surgeon of the Fifty-Ninth Indiana Volunteer Infantry during the Civil War; from 1863 to 1865 representative in the Legislature from Owen County; died at his home in Gosport, January 17, from pneumonia, aged 86.

Robert Schuler Black, M.D. Medical College of Indiana, Indianapolis, 1880; once president of the Kansas Medical Society and the Franklin County Medical Society; died at his home in Ottawa, January 12, from diabetes, aged 61. At a special meeting of the Franklin Medical Society, January 13, resolutions were adopted testifying to the excellent personal and professional qualities of Dr. Black.

Ernest C. McGouldrick, M.D. Johns Hopkins Medical School, 1904; for five years a member of the medical staff of Barnes Hospital, Washington, D. C., and thereafter a practitioner of Brewer, Me., and for two years city physician; since the summer of 1911 a member of the medical staff of the Eastern Maine General Hospital, Bangor; died at his home in Machias, Me., January 9, aged 37.

David W. Hershey, M.D. University of Buffalo, N. Y., 1854; assistant surgeon of the Ninety-Eighth New York Volunteer Infantry during the Civil War; for three years school commissioner for the third district of Erie County, N. Y.; for several years county physician and coroner of Otoe County, Neb.; died at his home in Nebraska City, January 15, from senile debility, aged 81.

Harry B. Gantt, M.D. University of Maryland, Baltimore, 1880; of Millersville, Md.; a member of the Medical and Chirurgical Faculty of Maryland; for ten years a member of the staff of the University Hospital, Baltimore; died in that institution, January 20, from pneumonia due to a streptococcus infection received during an operation four months before, aged 54.

Charles H. Terry, M.D. Albany (N. Y.) Medical College, 1864; a member of the Medical Society of the State of New York; assistant surgeon of the Ninth New York Volunteer Calvary during the Civil War; surgeon to St. Mary's Hospital, Brooklyn, since its foundation, and a police surgeon for thirty years; died at his home in Brooklyn, January 18, aged 67.

Egon A. Koerper, M.D. University of Pennsylvania, 1867; surgeon of the Seventy-Fifth Pennsylvania Volunteer Infantry throughout the Civil War and a member of the Medical Corps of the Army from 1867 until 1904 when he was retired by operation of law with the rank of colonel; died at his home in Washington, January 10, aged 75.

Isaac Sparks Smith, M.D. Memphis (Tenn.) Hospital Medical College, 1909; (registration, fifth judicial district board, Texas, 1901); formerly a member of the American Medical Association and a member of the State Medical Association of Texas; died at his home in Rogers, January 14, from meningitis, aged 52.

Howard Cooper (license, Nebraska, 1892); for more than fifty years a practitioner; surgeon in the Confederate service during the Civil War; first probate judge of Kearney, Neb., and for thirty years a practitioner of Lowell, Neb.; died at his home near Lowell, January 18, from senile debility, aged 95.

Charles Harrison Abbett (license, Indiana, 1897); a practitioner since 1860; surgeon of the Thirty-Second and later of the Eleventh Indiana Infantry during the Civil War; for forty-five years a practitioner of Indianapolis; died at his home in that city, January 11, from cerebral hemorrhage, aged 73.

William Treacy, M.D. Rush Medical College, 1877; a member of the American Medical Association; of Helena, Mont.; local surgeon to the Northern Pacific Railroad and president of the Montana State Board of Health, and State Board of Meat and Milk Inspectors; died in California, January 18, from nephritis, aged 55.

Franklin Baldwin, M.D. New York University, New York City, 1877; a member of the Medical Society of the State of New York; formerly visiting physician to the Bushwick and Brooklyn hospitals and the Eastern District Dispensary; died at his home in Brooklyn, January 13, from pneumonia, aged 56.

William M. Ewing, M.D. Medical College of Ohio, Cincinnati, 1873; for thirty years a resident of Ottawa, Kan.; died at the home of his daughter in Des Moines, Ia., January 16, from senile debility, aged 80.

William T. Hensley, M.D. University of Nashville, Tenn., 1872; of Huntsville, Ala.; died in Newmarket, Ala., recently, from acute gastritis, aged 60.

Enoch George, M.D. University of Maryland, Baltimore, 1872; a member of the Medical and Chirurgical Faculty of Maryland, and once president of the Caroline County Medical Society; for many years county health officer; died at his home in Denton, January 12, from pneumonia, aged 61.

Samuel H. Westman, M.D. University of Toronto, Ont., 1896; M. R. C. S. England, 1903; surgeon to the Toronto General Hospital, and assistant surgeon of the Royal Grenadiers with the rank of captain; died at his home in Toronto, Dec. 29, 1911, from acute nephritis.

Sherman D. Maynard, M.D. George Washington University, Washington, D. C., 1904; a member of the Medical Society of the State of New York; died at his home in Roscoe, January 12, from traumatic pleurisy, following the kick of a horse several weeks before, aged 47.

George Hoxie Beebe, M.D. New York University, New York City, 1879; a member of the Connecticut State Medical Society; a member of the board of education of Guilford for more than twenty years; died at his home in that town, January 9, from nephritis, aged 56.

Marie Louisa Holloway, M.D. Medical College of Indiana, Indianapolis, 1887; formerly a member of the Indiana State Medical Association, and a practitioner of Decatur, Ind.; died at the home of her daughter in Branson, Mo., January 16, from nephritis, aged 75.

Ambrose Beach, M.D. Bellevue Hospital Medical College, 1879; a member of the Medical Society of the State of New York and vice-president of the Hermanns Memorial Library, Coxsackie; died at his home in that place, January 15, from arteriosclerosis, aged 57.

James W. St. John, M.D. Chicago Medical College, 1865; a medical cadet during the Civil War; mayor of Janesville, Wis., in 1875 and 1876, and for two years president of the board of education; died at his home in that city, January 15, aged 72.

Osea Perrone, M.D. University of Genoa, Italy, 1873; of San Francisco; who fractured his hip in a fall from a buggy on his ranch near Mountainview, several weeks before; died in the Lane Hospital, San Francisco, January 2, from embolism, aged 64.

Joseph W. Oliver (license, Iowa, years of practice, 1886); a veteran of the Civil War and a practitioner of Jefferson County, Ia., for forty-three years; died at his home in Fairfield, January 12, from cerebral hemorrhage, aged 75.

Samuel Oscar Sterrett, M.D. Jefferson Medical College, 1880; a member of the Medical Society of the State of Pennsylvania; formerly president of the First National Bank of Mars; died at his home in Downieville, January 12, aged 60.

John A. Walser (license, Indiana, 1897); a practitioner of Linn Grove and Anderson for thirty-one years; once a member of the board of aldermen of Anderson; died at his home in that city, January 7, from pneumonia, aged 59.

Charles W. Townsend, M.D. Jefferson Medical College, 1849; a member of the Pennsylvania Legislature from Washington County in 1883 and 1884; died at his home in Venetia, Pa., January 13, from senile debility, aged 89.

Harris A. Slocum, M.D. University of Pennsylvania, Philadelphia, 1879; emeritus professor of gynecology in the Philadelphia Polyclinic; died at his home in Philadelphia, January 15, from cerebral hemorrhage, aged 54.

Edward Joseph Schevcik, M.D. New York University, New York City, 1883; one of the best known Bohemian practitioners of New York City; died at his home, January 14, from cerebral hemorrhage, aged 46.

Jesse R. McAfee, M.D. Medical College of Georgia, Augusta, 1858; brigade surgeon in the Confederate service throughout the Civil War; died at his home in Dalton, Ga., January 14, from senile debility, aged 81.

William H. Battin, M.D. Rush Medical College, 1873; formerly of Oxford Junction, Ia., but for eighteen years a practitioner of Phoenix, Ariz.; died at his home, January 10, from cerebral hemorrhage, aged 62.

George Englebach Conrad, M.D. Eclectic Medical Institute, Cincinnati, 1878; of Johnstown, Pa.; died in the American Hospital for Diseases of the Stomach, Philadelphia, January 11, after an operation, aged 58.

Jane Spencer Miller, M.D. Homeopathic Medical College of Missouri, St. Louis, 1880; died at the home of her daughter-in-law, in Moline, Ill., January 9, from senile debility, aged 78.

John B. Banks, M.D. Meharry Medical College, Nashville, Tenn., 1885; died at his home in Natchez, Miss., Dec. 30, 1911, aged 49.

The Propaganda for Reform

IN THIS DEPARTMENT APPEAR REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY AND OF THE ASSOCIATION LABORATORY, TOGETHER WITH OTHER MATTER TENDING TO AID INTELLIGENT PRESCRIBING AND TO OPPOSE MEDICAL FRAUD ON THE PUBLIC AND ON THE PROFESSION

PSEUDOMEDICINE

Gordon W. Rice, B.S., M.D.
CHAMPAIGN, ILL.

Although the medical profession is to-day better equipped by science for the relief of human suffering than it ever was before, and though it is accomplishing greater deeds than in any previous age, many cults and isms are seeking to break into the profession through the back door—Perkinism with its retractors, Stillism with its dislocated vertebræ, Mechanotherapy with its deranged functions of the circulatory system, Chiropractic with its nerve vibrations and spontaneity of thrust, Eddyism with its absent treatments, Wiltmerism with its thought concentrations, Dowieism with its bombast, Samuelism with its eye water, and commercialism with its destruction of medical ideals.

What has produced these cults and schisms? Is it constitutional gullibility, is it ignorance of medical achievements, or is it the failure of the medical profession to make good that causes the layman to take his suffering child to the person unfamiliar with the human body, and unlearned in the diagnosis and treatment of disease? In no other department of education in America is there such a difference between the best offered and the poorest as in medical education. When a young man seeks employment in any institution, educational or business, one of the first questions asked him is: "Where were you trained?" And unless he can produce evidence of satisfactory training he is turned down. How many people ask this question when they employ a physician, and how many would know the difference between the work done in the best, fully equipped medical school and that done in the half-baked business institution that turns out raw and ignorant practitioners for the profit received from fees?

After all, it is impossible for the individual citizen to acquaint himself with the quality of the work done in our medical schools or to be able to discriminate the good from the bad. The only protection offered him is that of medical practice acts, which, so long as they are dominated by the blighting influence of politics, will scarcely hasten the time when every M.D. degree granted in America will stand for culture and learning. We have at least three grades of legalized medical schools, classed as A, B and C by the Committee on Medical Education of the American Medical Association, and the product of the poorest is equal, in the eyes of the law and of the public, to that of the best. The public dubs a man "doctor" whether his training was an eight weeks' "optometry" course, a correspondence course from a "mechanotherapy" or "chiropractic" institution, a nine months' course in "neurology" or the course required by the best university in the land.

In order to get first-hand information as to the product turned out by some widely advertised so-called drugless institutions, I wrote several letters of which the following, to the "National School of Chiropractic and Physiological Adjustment," Chicago, is a sample:

Gentlemen: Please send me information about your course. How long does it take, what chances are there for a man to make his living after taking your course? How much does it cost?

I have a common school education, but never went to the high school but a short time. I am now working on a farm at twenty-five dollars per month, and want something better. Can one practice after getting your diploma, or does he have to take an examination like doctors?

I received a booklet and the following letter:

Dear Mr. ———: Under separate cover we are forwarding you one of our booklets, and other literature, which explains CHIROPRACTIC in a nut-shell. We take it that the evidence

thus given as to the virtues and potency of the system, has been convincing and conclusive. . . .

The Howard System is to Chiropractic what Morse was to Franklin, and what the Edison system is to-day. Fulton introduced the steamboat, Stephenson the railway, and Arkwright the spinning frames; the present stage of development and efficiency of those systems was left to others to develop and perfect. . . .

We are teaching hundreds of busy operators, as well as students of the healing art, how to increase their efficiency in handling the many perplexing cases of sickness and disease. Many of these individuals have only a few minutes a day to spare, but the extra progress made each day by our definite and well tried plan of instruction has enabled them to double, treble and in many instances, add five and ten times to their income.

We offer you by this plan, a specialized training; more development of your capabilities, and a greater breadth of knowledge and experience, in exchange for a few moments of your time each day, at a cost of only 30c per day, for the year. . . . Remember it is not the time you put into a study that counts, but what you get out of it. It's the system you use; we teach the right system,—to use it means Success. . . .

Send your application in to-day with your first payment. A few months will bring you big interest on your investment.

Yours very truly,

THE NATIONAL SCHOOL OF CHIROPRACTIC.

Per *Milton L. Smith, D.C.*

P. S. You will be able to do a great deal of this work. After you have finished the Home Study Course, you can come in and take the three-months post-graduate course, to finish up with. The matters taken up in our course, covers the topics taken up in a two-year course. With diligent the course can be covered in a period of from six to nine months. . . . This course will be $150, including preparation for the State Board Examination; concluding from your letter, you will have no difficulty in obtaining what is necessary in this respect, Act at once, and let us have your enrollment mail. If you cannot make full payment with your enrollment, pay what you can, and then make payments promptly, regularly every month.

Desiring a little more definite information as to what such a learned (?) man could expect before a state board, I wrote again as follows:

Gentlemen: Your letter received and it looks good to me. I was just going to send in the long green, but was talking to a friend that I wanted to go in with me, and he said he knew a man doing that kind of work and he got fined a hundred dollars and costs for not being "registered". What do you say about that? You say you can fix me so I can pass the state board examination. What does one have to do? If you will guarantee me that I will pass, you can count us on.

To this I received the following reply:

Dear Sir: It is evident from your correspondence, that we made you a special tuition rate for our Home Study, Post-Graduate, and State Board Course, that is, three courses at the tuition of one. As far as guaranteeing you to pass the State Board Examination in Illinois, we have made arrangements with Dr. Fomon to give our students special preparatory work, with a view of meeting the requirements of the State Board, as outlined under the act "Other-Practitioners" in the State of Illinois. Dr. Fomon's rate of tuition at the present time is $100.00, under a guarantee contract. Our course in Chiropractic, and Physiological Therapeutics, is $100.00 including the Extension and Post-Graduate work here, after having finished the Home Study Course. We would be pleased to make you a rate of $100 as suggested, for the Home Study, Post-Graduate, and work with Dr. Fomon's State Board Preparatory Course, but we would not care to undertake the guarantee agreement for this course in the combination. We would be willing however, to give you two courses in Chiropractic, that is, one for yourself, and one for your friend, at a joint tuition of $150 for the two courses in Chiropractic, and $50.00 each for the State Board Course. We would be willing to refund your money for the State Board Course, should it so happen that you would be refused the privilege of taking the State Board Examination, on account of inability to pass.

If this is agreeable to your circumstances, let us have your enrollment by return mail, as it would be necessary for you to have your enrollment in, if you wish to take the January Board, by November 1st, that is, you must be here to enter the State Board class by that date, in order to prepare for the January Board.

Trusting that this will meet with your circumstances, and that we shall have the pleasure of beginning you at once, we are

Yours truly,

THE NATIONAL SCHOOL OF CHIROPRACTIC.

Per *John F. A. Howard.*

To another widely advertised drugless institution, I wrote as follows:

American College of Mechano-Therapy, Chicago, Ill.

Gentlemen:—I saw your add in one of the papers, and if a fellow can do what you say, just count me on.

Send me your dope on the subject so I can look it over.

How about this college educations, that some say a man has to have before taking up the study for a doctor? If you want that, I am afraid I cannot chin it, because I have only went through the eight grade, I am now writing insurance and can make a little more than a living on account of so much competition.

What does your course cost, how long does it take. I got a little money to put into my head and want it in stuff that will do me the most good financially. Can a man begin practice when he gets a diploma or does he have to take an examination before some fellow that don't know any more than he does. Let me hear soon. Can one begin at any time.

Yours truly

In reply to this intellectual production I received the following letter:

Champaign, Ill.

Dear Mr. ———: In fulfillment of our promise, we are sending you, free of charge, under separate cover, our Prospectus of this College and full particulars regarding our instruction in the Science of Mechano-Therapy, the latest and best method of Drugless Healing, which, during the last few years, has assumed a commanding position in the confidence of the American people and which is rapidly replacing all other drugless methods. . . .

A graduate of this College, who masters the Science of Mechano-Therapy, studying only in his or her spare time, is dependent upon no one. He or she is master of their own time and energies—he or she is looked up to and ranks in the same social way as the clergymen or any other professional person.

To master this complete Science is simple, indeed, to those who possess a common school education. Our Course is so prepared as to insure success to all those who conscientiously desire to succeed and who will utilize their spare time in studying the instructions we send. . . .

When you have finished your course, we present you with a magnificently embellished diploma and confer upon you the honor and distinction of the degree of D. M. T. (Doctor of Mechano-Therapy).

To demonstrate to you how thoroughly practial a course in Mechano-Therapy is, from the standpoint of financial betterment, let us tell you that we have on file, in the Correspondence Department of this College, drawer after drawer full of letters from our graduates.

Before me lies the letter of a doctor in a Southern city, who is making from $25 to $35 per day; another from a young woman located in New York, who writes that she earned $80 in four days; still another woman is earning $10 per day, making private calls as a Mechano-Therapist; a number of our graduates have organized sanitariums in various parts of the country—have established themselves in the confidences of the community and are making big money. . . .

Upon receipt of your enrollment, with remittance, first lessons, together with a complete set of our Anatomical and Physiological Charts, and a Manual, explaining the charts, will be forwarded at once and your course will begin.

Yours sincerely,

AMERICAN COLLEGE OF MECHANO-THERAPY.

Steno. 31 S. T. Page 3 *DP. W. C. Schulze,* Pres.

Before taking up the next subject that I wish to discuss, I want to preface my remarks by stating that I recognize, honor, and respect the influence of the mind on the body, and in the hands of the person qualified to differentiate organic disease from functional disorders it is a valuable therapeutic measure, but the man or woman who, under the guise of religion, makes

use of it to prey on the ills and ignorance of his fellow man is unworthy the respect accorded a collarless cur.

Eddyism, which I refuse to designate by the commonly accepted term because I would not pollute the sacred words "Christian" and "Science" by linking them to what Locke rightly calls "a miserable compound of Hindu pantheism and Brahmin theosophy, medieval mysticism and idealism, supreme selfishness, fantastic vagaries, grotesque nonsense, imbecile contradictions, anarchy and infidelity," would be unworthy of medical notice were it not for its possible influence on the spread of infectious disease and the opposition of its followers to needed sanitary legislation. Senator Works' attributes to the influence of this cult 60 to 75 per cent. of the 200,000 membership of the so-called League for Medical Freedom, whose object is to oppose any legislation tending to the establishment of a national department of public health, or to increase the efficiency of our state boards of health. We have the spectacle of a United States senator lauding on the floor of the senate chamber a cult that believes in such principles as the following: "When less thought is given to sanitary subjects there will be better constitutions and less disease."[1] "Treatises on anatomy, physiology and health sustained by what is termed material law are the promoters of sickness and disease."[2] "Truth handles the most malignant contagion with perfect assurance."[3] "If the case to be mentally treated is consumption show that it is not inherited, that inflammation, tuberculosis, hemorrhage, and decomposition, are beliefs, images of mortal thoughts, superimposed upon the body. Then these ills will disappear."[4] "Science can heal the sick who are absent from their healers as well as those present, since space is no obstacle to mind."[5]

Desiring to get some direct information as to how this business is worked I wrote the following letter, purposely misspelled and ungrammatical, describing an imaginary case and had it mailed from Murfreesboro, Tenn., to one of the prominent so-called healers in this community:

Dear Miss:—I heard a short time ago by a person I met on the train that you can cure sick folks. Now i've been sick nigh onto four year and don't get no better. I spent lots money and don't do no good. I don't know whats matter with me but tell you how I feel.

I have pain in my stomach and lots of hedache and can't walk up strait for something pulling in my stomach, I don't eat much don't care to. And now since three months there is a big sore on my left leg below the knee and the knee is getting crooked so I have to limp when I walk. My bed has been so bad it is now gone to my eye. The sight of one is bigger than the other and I don't see so good out it as out other eye. You see I am nervous by my writing I have to bare down so hard on my pen I can hardly write.

If you can cure me I can pay you for it as I have enough to live on and some besides.

What will you charge me to treat me, will I have to come there?

The person I met said you cured people when you was not near them. Can you do it? I lost her name, and can't remember it, write me at once.

I received the following letter:

Dear Mr. ————: No doubt you know something of Christian Science and what it will do for us. I know that science will help you, and will be glad to give you treatment beginning to-day, or I will wait until I hear from you. Treatment is $1.00 and is given each day. I can give you absent treatment and would like to hear from you every two days by letter. It is advisable to procure a copy of Science and Health and begin reading, giving a portion of each day to this. The books are three (18c postage) and five dollars (no postage) a copy which I can forward from here.

There is an advantage in seeing and being with a practitioner, but it is not a necessity in many cases.

I have no doubt you will get along well with absent treatment. Kindly let me hear from you on receipt of this and oblige,

Very sincerely,

ELIZABETH T. WENDLAND.

Champaign, Ill., Sept. 23, '11.

1. Congressional Record, July 10, 1911.
2. Science and Health, p. 175.
3. Science and Health, p. 175.
4. Science and Health, p. 176.
5. Science and Health, p. 425.
6. Science and Health.

A few days after receiving the above, I wrote again, saying: "Since writing you I feel better. Have you been doing anything for me?"

I received the following reply:

Dear Mr.————: Replying to your inquiry as to whether I had been helping you, will say I have not been giving you treatment but I have tried to realize the truth about God's man when thinking of you, which I have done at times since writing and receiving no reply to my letter. This right thinking has been sufficient to relieve you for which I am very thankful.

Very sincerely,

ELIZABETH T. WENDLAND.

I wrote also (this time from Urbana, Ill.) to a man who is associated with the above-mentioned woman, and who is, I am informed a "reader" in the "First Church of Christ, Scientist," Champaign, Ill. To him I described as follows, under the fabricated name of "appendixbogusitis," a hypothetical case of chronic recurrent appendicitis gone on to abscess formation.

Dear Sir:—I am awful sick, and a friend was in this morning and wanted me to try you. I have been sick off and on for almost a year every month or so. I would have pain in my right side, and it is low down and I would vomit and be awful sick for four or five days, then I would get better and be able to work for a while, but would soon get bad again.

About a week ago I got so bad that I had to go to bed. Had awful pain in right side, was constipated, had feaver, and vomited lots of times. The doctors say I got appendix-bogusitis and say I got to be cut open to let it out. There is for two days a big lump in my right side below ribs, it is so sore I can hardly touch it.

I don't want to have an operation, my friend wants me to see what you can do, but the folks don't hardly believe in it. Now do you think you can help me? If you can treat me by what they call absent treatment, I wish you would. My friend read this from Mrs. Eddy book. "Science can heal the sick when absent from their healer as well as present, since space is no obstacle to mind."

You can send your bill to me at general delivery, Urbana, as I am not letting the folks know I am writing. Answer right away.

I received the following letter in reply:

Dear Mr. ————: I received your letter this afternoon, and will give you treatment.

It is God that heals. His loving care is infinite. He fills all space and is the only mind. Trust him with all your heart.

Try to arrange to come to my office Monday afternoon. I will give you treatment to-day, to-morrow and Monday. Treatments are $1.00 each. Please let me hear from you.

With love,

B. F. STOLTEY.

Here was a presumably dangerous condition calling for surgical intervention, which one B. F. Stoltey was willing to treat by sitting in his office, probably mumbling over some formula. Is this not a return to medieval exorcism? Frequently during my professional life I have found, that, from the standpoint of personal comfort, it would have been easier to sit in a comfortable room and give "absent treatment" than to go out into the storm and drive many miles to relieve the suffering of a fellow being. How can any intelligent person believe that a faker willing to make the pretense of "absent treatment" has the faintest conception of the spirit of Christ?

This is the institution which was lauded on the floor of our United States Senate, and which, as above stated, furnishes 60 to 75 per cent. of the organized opposition to the establishment of a national department of health! During a career of forty years its adherents have never established a mission, a charity, or a school. They can number in their ranks no professor of anatomy, biology, geology, psychology, physics, chemistry, astronomy, logic or philosophy. "You can find in these chairs Catholics, Protestants, Jews, Unitarians, agnostics, and what not, but never a Christian Scientist." ("Eddyism," Locke.)

V. 5
1912

Oleum Telesphoros—A New Use for Oleomargarine

The following letter sent to THE JOURNAL by Albert P. Mathews, Ph.D., professor of physiologic chemistry in the University of Chicago, is interesting. Dr. Mathews' letter illustrates once more the much overworked scheme on the part of manufacturers of proprietary remedies of investing very ordinary substances with most extraordinary properties—and names.

"Under the name 'Oleum Telesphoros,' an animal oil is being recommended for use in abdominal surgery for the purpose of preventing adhesions. Whether oils of animal or vegetable origin may have such an action or not I am not competent to judge, but I am much amused at the name of this 'sacred oil' and the claims made for it. From the description of its origin it is obviously nothing more or less than 'oleo oil' or oleomargarine' as it is called abroad, and the chief basis of oleomargarine made in this country. Few would recognize it under the high sounding name of Oleum Telesphoros, and few probably would be willing to pay $2.00 a pint for it under its trade name. The statement that, being derived from the omentum and appendices epiploicæ, it is hence 'no more than natural that one of its greatest spheres of usefulness should develop in its application to abdominal surgery,' will carry great weight with those who believe that kidney beans are a panacea for kidney disease and that lunacy is due to the moon."

Correspondence

Home for Widows and Orphans of Physicians

To the Editor:—About two years ago some of us instituted a movement for the founding of a home for widows and orphans of physicians. Since that time we have worked steadily but quietly for the raising of funds and now, sooner than many thought possible, we have seen the realization of our hopes and wishes by the purchase in fee of a large and handsome building at 1615 Bolton Street in this city. The house is a three-and-a-half-story brick mansion with a frontage of 20 feet and depth of lot 132 feet. It is in the choicest residence section, off the lines of street cars yet easily accessible to several of them. There is a wide alley in the rear and the surroundings are exceptionally good. There is a tiled vestibule, and a handsome staircase extends from the wide hall to the third floor. There is a fine suite of rooms on the first floor admirably adapted for receptions, entertainments, etc. There are bath-rooms on the second and third floors. As soon as the building can be put in order we expect to open it for a number of applicants who are waiting to enter. We purchased this property in fee because we thought that the best plan and we did not wish to lose such an eligible offer. But, of course, this has involved us in considerable expense and we appeal to all members of the profession to aid us by gifts, large or small. We shall exercise the closest economy, but the maintenance of an institution of this size will demand large expenditures and we must depend very largely on the liberality of our friends, especially those of the medical profession. I am glad to be able to announce that we have just received a contribution of $100 from Dr. Hugh H. Young, president of the Medical and Chirurgical Faculty of Maryland, and that Drs. Jacobi, Welch and Harvey Cushing are also among our patrons.

EUGENE F. CORDELL, M.D., Treasurer.

257 West Hoffman Street, Baltimore.

The Army Canteen

To the Editor:—A correspondent in THE JOURNAL, Dec. 30, 1911, p. 2155, expresses a desire that the liquor canteen be reestablished at army posts, hoping that thereby this loungingplace may be made more attractive than the more disreputable drinking-places outside.

If our soldiers cannot find agreeable amusement without booze to make it attractive it is time that a determined effort to refine their depraved taste be made by the officers, who have plenty of spare time on their hands; for surely it cannot be possible that officers themselves can be dissipated and they therefore could, by both example and precept lent to their work, elevate the minds and morals of these debased men to enjoy wholesome sports and respectable amusements.

It is as absurd to furnish our soldiers beer to make them happy and keep them straight as to turn a lot of low women into the camp or to institute a legalized gambling hell.

The difficulty appears to be the lack of control exerted by the officers over the men, the last condition that should exist in a properly disciplined army, and the unwillingness or inability of the same officers to enforce the laws and clean up and clear out the saloons, speakeasies and brothels that infest like vermin the surroundings of an army post. If in times of peace our regular army cannot keep order within itself, or decency and law in its environment, is it worth maintaining for prospective wars? If we must allow the soldiers to drink in order to keep them sober when their services are not required, what good will they be when a cool head and steady, courageous nerve are essential.

EVAN O'NEILL KANE, M.D., Kane, Pa.

Addition to Article on Control of Typhoid

To the Editor:—Kindly note the following omission for which I am responsible in the article by Drs. Price, Rohrer and myself concerning "A Practical Method for the Control of Typhoid Fever" in THE JOURNAL, Jan. 20, 1912. On page 166, after "distilled water," in the third paragraph I should have added the following: "Enough of a 1 per cent. solution of azolitmin is then added to the medium to impart a lavender color to this solution."

WILLIAM ROYAL STOKES, Baltimore,
Chief, Bureau of Bacteriology, State of Maryland Department of Health.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

PHYSIOLOGIC EFFECT OF COLOR OF GARMENTS

To the Editor:—What would be the physiologic or other effect of a light-colored garment with a dark inner surface, an arrangement somewhat analogous to the arrangement of pigment in the skin? Has there not been some work done along this line in the tropics, and if so, kindly quote conclusions briefly.

H. B. FORBES, Ogden, Utah.

ANSWER.—White cloth reflects the rays of the sun and does not absorb heat, but the effects of tropical climates are largely attributed to the actinic or ultraviolet rays, and it is not certain that white surfaces prevent the passage of these rays. White cloth is generally recommended as a proper color for outer clothing in the tropics. The use of dark cloth to lessen the effect of light would seem to be rational, in view of the protective action of pigment in the skin. This view has been especially developed by Major Woodruff. He considers that white men cannot become acclimated in the tropics and that they must be protected by clothing opaque to the blue and ultraviolet rays. For this purpose, he says, the outer clothing should be white, gray or yellow, because the heat will be least absorbed by these colors, while the underclothing should be black or yellow to stop the ultraviolet rays. A trial of orange-red underclothing was made in the United States Army in the Philippines and the results indicate that garments of this color are inferior in comfort to white and show no evidence of being protective against the sun's rays (THE JOURNAL, May 28, 1910, p. 1793).

TOILET VERSUS WATER-CLOSET

To the Editor:—Is it too late to nail to the counter a spurious neologism that has been insidiously working its way for some time into the currency of the King's English? In a word, shall "water-closet," a word so acceptable to civilized man that it has been welcomed to the vocabularies of almost all modern languages, give way to "toilet" as implying the like concept? Surely, physicians who carry the principles of aspecticism into the practice of speech and abhor impurities in their mother tongue may still accomplish something by making a stand against the squeamishness of female

patients and nurses on whose lips the offender is oftenest heard. The last straw in my own tolerance came the other day in the shape of a circular issued by the State Board of Health over the signature of its secretary, a physician, in whose virile mind a spade is usually that and nothing else. This was the shocking clause: "Plenty of running water, soap, convenient *toilets* to receive the dejecta from the patients."

"O, what a fall was there, my countrymen!"

A water-closet, night-stool, bed-pan, urinal, privy, dejection—for the new word seems to connote all these things—are not and never can be a *toilet* by any stretch of metonymy. Time was, and not so long ago, when one might speak of a lady as being at her toilet without risk of ambiguity. Now the word is apparently taboo except when used in a mealy-mouthed attempt to estheticize an uncompromising act of nature.

"Immodest words admit of no defence,
For want of decency is want of sense."

But there is nothing more immodest than false modesty, and the offense against decency is aggravated a hundredfold when in addition violence is done to the genius of our English tongue. When Pope wrote:

"The merchant from the exchange returns in peace
And the long labors of the toilet cease,"

there was no thought in the poet's mind of protracted travail at stool, which interpretation, if we are not careful, may one day be read into the couplet.

Help the profession, Mr. Editor, to hold fast to honest words and teach it to look askance at such as plead for acceptance, or thrust themselves on us, under the guise of a specious refinement; and let those of us who still pretend to chivalry make a supreme effort to prevent the dressing-table of a lady, her costume or her act of dressing from acquiring irrevocably the perverted significance as to which I have ventured to put the brethren on their guard.

B. G. A.

ANSWER.—We too deplore the danger of perversion of the language pointed out by our correspondent. What makes a bad matter worse is the fact that the linguistic disease of which he gives an instance is not self-limited in its course. As a matter of fact, several of the words cited by our correspondent as plain and unobjectionable synonyms ("water-closet" "privy") evidently began as intended euphemisms; and, by the same token, when (if ever) "toilet" becomes unmistakably associated with the acts of defecation and urination, such dainty persons as employ it to-day for a delicate evasion will find it disgusting and will reject it in favor of some other word of more refined associations. Thus the degradation of words may continue indefinitely; for a euphemism serves its purpose only while it is fresh. "To hold fast to honest words" is an ideal worthy of attainment.

On the other hand, we need not be too severe on the mistaken modesty which seeks refuge in such inappropriate language; it is the result merely of a kind of provincialism—an inability to see that conventionalities, legitimate and necessary as these may be in their proper and respective places, are not universal laws. Drawing-room conventionalities, ludicrously misapplied in spheres where they have no validity, do not necessarily indicate immodesty or false modesty, but merely a certain lack of *savoir vivre*.

METHOD OF PROCEDURE WHEN SUPPLANTED BY CONSULTANT

To the Editor:—Will you favor me with your opinion and advice concerning the case I am about to relate? A physician (A) had under his care a member of a family which he had attended for a number of years. When the case had continued about three weeks he called a consultant (B). A second consultation was held about a week later. Shortly after this the attending physician was called away on business and arranged with the consultant to care for the patient until the attending physician's return. The consultant very kindly agreed to do this. As soon as he took charge of the case, however, he had his wife take the patient nice things to eat and made special efforts to ingratiate himself into the patient's good favor. When A returned he received no report of the case. The next day he went to the physician who had substituted for him, expecting to take charge of his patient. B told him to call and see the patient some time during the day, which he did, and was informed by B that B had arranged to take care of the case for the future, which B has been doing since that time.

C. N. D.

ANSWER.—The above letter must be regarded as an *ex-parte* statement; the other side must be heard before judgment can be rendered. Evidently, the aggrieved Dr. A feels that Dr. B, who was left in charge of the patient, "stole" the case. This may or may not be true. One thing is certain—the patient has gone from A's care and it is not probable that B could, even if he would, induce her to return to A. Should A charge his loss to the expenses of the trip and let the matter rest, or should he take some action in the case, and if so what? Unless an understanding be reached, or unless A finds that there were extenuating circumstances, there is danger that the present strained relations of these physicians will develop into an open rupture. Consequently, it would be wise for A to tell B that he, A, has been seriously annoyed about this case; that, prior to this incident, he had always believed B to be "square"; and that, because he held this opinion, B had been called in consultation and had been asked to care for the patient; that A had heard that B had used the opportunity to supplant him and that with this end in view Mrs. B had served the sick one with dainties; that, at B's suggestion, A on his return had called on his former patient who had informed him that B "had arranged to take care of the case"; that naturally he had been much put out, but he felt sure there must be some explanation. It would be well for A to add that possibly some things he had heard were misstated, or that perhaps all the circumstances had not come to his knowledge; that because of all this, he thinks it best for them to talk over the matter, at first hand, and, if possible to come to an understanding; that, much as he regrets the loss of the patient, he would be far more grieved to lose confidence in a physician whom he had regarded as a gentleman.

As the result of such a frank conference, it may be found that B had earnestly endeavored to have A continued, but that the patient had declined to be returned to A's care; that neither would have been retained if B had withdrawn; and that the attentions shown by Mrs. B may have been really very slight courtesies that her relations with the patient warranted.

Of course, as the letter presents the subject, "the appearance of evil" calls for a statement from B. If any of the conditions suggested influenced his action, it would have been better if he had made the state of affairs plain to A when that physician returned from his business trip, and avoided the risk of A's receiving an erroneous impression from the patient's statement. It is the right of the patient to employ the physician of her choice and to dismiss one physician and to select another when she wishes, but in justice to all concerned and in the interest of harmony in the community, the patient should make such change in a manner that gives no just cause for unkind feelings between the physicians. In this case the language assigned to the patient is unfortunate. The patient is quoted as having said that B had "arranged to take care of the case for the future." This is precisely what B should not have done, but perhaps this is merely a question of verbiage.

It is worthy of note that many a physician, bearing in mind the possibility of misunderstanding, refuses to accept such a case, even though his refusal means that a third physician will be called. Such a conscientious physician once expressed himself thus: "I do not want such a patient under any condition, if there is the least chance that I thereby lose the friendship of Dr. ————." It would be well to advise the patient that it would be better for all concerned if the original physician were permitted to complete the care of the patient in this particular illness but that the consultant would accept a call at some future time, when a physician's services were required.

To return to the interview recommended—should it fail to establish an understanding, the subject should be referred for arbitration to the board of censors of a compponent county medical society where A's charges should be preferred and a trial conducted in the interest of "the good of the profession" rather than to uphold the "rights" of an individual. In other words, the object of the board of censors should be to establish the principle of conduct that all gentlemen recognize—that we should treat others as we ourselves would be treated.

SUGAR IN HYPERACIDITY

To the Editor:—I have read with much interest the article in the Department of Therapeutics, Jan. 6, 1912, on "Prescription Nonsense," and hope that it will accomplish much good in encouraging thought and care in prescription-writing. I should like further enlightenment on the statement (page 35) "Any sugar, even sugar of milk, is better not given to a patient in whom one is attempting to reduce hyperacidity." Is there authority for this statement? Einhorn in his "Diseases of the Stomach," p. 156, says: "The carbohydrates in the form of sugar (taken in large quantities) have been found by the painstaking investigations of Dr. William Gerry Morgan of Washington, to lessen the amount of acidity in the stomach. Sugar can, therefore, be administered with advantage in cases of hyperchlorhydria." In a considerable experience with gastro-intestinal cases I have seen no bad effects from sugars in hyperacidity and so am prompted to ask the above question.

J. RUSSELL VERBRYCKE, JR., Washington, D. C.

ANSWER.—1. It should be remembered that we were discussing the hyperacidity of ulcer of the stomach, and not simple hyperchlorhydria.

2. Sugar will not cause hyperacidity, but ordinarily clinically will not reduce it.

3. Sugar given alone is one of the most quickly absorbed of foods, but in combination with other foods, or in combination with drugs, it may not be digested or absorbed so readily.

4. If there is any tendency to nausea and vomiting, as there is with ulcer of the stomach (and with ulcer of the stomach a hyperacidity is likely to be present) the patient is better off without a sugar in the food or medicine given. This is not to affirm that sugar may not be advisedly used as a food but it is best given alone. Clinical experience seems to demonstrate distinctly that in the vomiting stomach, with or without hyperacidity, sugar generally adds to the trouble rather than diminishes it.

While on this subject, it is not inappropriate to remark that it is a frequent inconsistency of physicians, in fermentative disturbances of children, to prohibit sugars and sweets, and then to administer some drug in a sickish sweet syrup. Also, stomachs are frequently upset by a simple cough remedy because it is in a sweet, syrupy solution or mixture. Sugar is a food, and a valuable food, but when a patient is sick, the amount of sugar, and the way it is taken, should be carefully and properly regulated.

CREOSOTE IN PETROLATUM SAPONATUM LIQUIDUM

To the Editor:—What is petrogen? How is creosote petrogen (20 per cent.) made? Kindly give directions for making a creosote remedy that can be rubbed in instead of being administered internally. C. TILLMANNS, Sigourney, Iowa.

ANSWER.—Petrogen is essentially a mixture of liquid petrolatum and soap liniment. This preparation does not widely differ from the preparation of the National Formulary called petrolatum saponatum liquidum (petrox) which contains:

Liquid petrolatum (U. S. P.)	100 parts
Oleic acid (U. S. P.)	50 parts
Spirit of ammonia (U. S. P.)	25 parts

Mix them by agitation.

It is proposed, in the forthcoming edition, to change the name to liquid petroxolin and to modify the formula as follows:

	Gm.
Liquid petrolatum	50
Oleic acid	28
Oil of lavender flowers	2
Stronger ammonia water	5
Alcohol	15

Mix the liquid petrolatum and oleic acid in a flask, add the alcohol and then the stronger ammonia water, and warm the mixture on a water bath, with frequent agitation until it becomes clear. Finally, add the oil of lavender flowers and mix thoroughly.

We have not the data for describing the exact method of preparing creosote petrogen, but the following formula is proposed for creosote petroxolin, which is an equivalent preparation:

	Gm.
Creosote	20
Oleic acid	5
Liquid petroxolin	75

As guaiacol, the principal constituent of creosote, is readily absorbed by the skin, it is probable that a solution of creosote in the petrox could be used for the purpose of introducing this remedy into the system by rubbing into the skin.

SINE QUA NONS

To the Editor:—In THE JOURNAL, Jan. 27, 1912, p. 278, the Latin phrase "sine qua nons" figures as the plural, I presume, of "sine qua non." Am I wrong in believing that "sine quibus non" would have been the correct version? Will you refer this to your department of philology for the enlightenment of one who has forgotten much Latin and more Greek?

A. C. CROFTAN, Chicago.

ANSWER.—This phrase, here used as a substantive, seems to have been a slight stumbling-block to several of our readers. We have no department of philology at present, but we can establish one if such interesting questions as this arise in sufficient number.

The phrase "sine qua non" has come to stand for the substantive idea, "a necessity," "an essential." It is commonly used with an article before it ("a sine qua non in this work"—"the sine qua non for success"), indicating that it is regarded as a noun. It is therefore pluralized as substantive phrases usually are in English, even when borrowed from other languages. To pluralize a part of the phrase would be contrary to custom and in many instances would not convey the desired meaning, as will readily be seen on examining a few instances. Try substituting "Hic Jacent" in the following from Tennyson:

> Among the knightly brasses of the tombs
> And by the cold Hic Jacets of the dead.

Other examples are: "Te Deums are sung by the choirs," "these men are a lot of do-nothings," "amid the I-told-you-sos of the wiseacres,"—or make your own list, as B. L. T. occasionally remarks in his delightful column, "A Line-o'-Type or Two," in the Chicago *Tribune*. Of course, phrases thus used substantively tend to become regular nouns, and the end of this process may be seen in such words as "subpoenas," "facsimiles," "flats," "omnibuses," "carryalls" and "dreadnaughts."

We confess that it would have been better if we had not italicized "sine qua nons," for to use it in ordinary type would have indicated more clearly that we were using the Latin phrase as an English substantive.

The Public Service

Medical Department, U. S. Army

Changes during the week ended Jan. 27, 1912.

Wing, Franklin F., dental surgeon, ordered to return to Fort D. A. Russell, Wyo., on completion of temporary duty at Fort Robinson, Neb.

Grubbs, R. B., major, ordered to duty with troops from Fort Bliss, Tex., to Fort Benjamin Harrison, Ind.

Mills, R. W., M.R.C., ordered to duty with Co. K, 3d Cavalry, from Sam Houston to Fort Clark; then to proceed to Rio Grande, Tex., for duty.

Owen, Leartus J., captain, returned from duty with troops at Rio Grande, Tex., and to return to Fort Benjamin Harrison, Ind.

Davidson, William T., major, ordered to duty with troops from Fort McIntosh, Tex., to Fort Benjamin Harrison, Ind.

Long, Charles J., dental surgeon, returned to Fort Andrews, Mass., from duty as witness general court martial, Manila, P. I.

Stuckey, Harrison W., M.R.C., granted two months' leave of absence.

Koerper, C. E., major, leave of absence extended twenty days.

Gandy, Charles M., lieut. col., relieved from duty in the Philippines division and will repair to this city and report to the surgeon-general of the Army for duty in his office.

Ireland, M. W., lieut. col., relieved from duty in the office of the surgeon-general of the Army and will proceed to San Francisco and report to the commanding general, western division, for temporary duty; August 5 to sail for the Philippine Islands for duty.

Stallman, George E., dental surgeon, left Fort Clark en route to Fort McIntosh, Tex., for temporary duty.

Ireland, M. W., lieut. col., granted four months' leave of absence, to take effect after his arrival at San Francisco.

Crampton, L. W., colonel, leave extended seven days.

Davidson, Wilson T., major, relieved from duty at Fort McIntosh, Tex., and ordered to Fort Bliss, Tex., for duty.

Grubbs, Robert R., major, relieved from duty at Fort Bliss, Tex., and ordered to Fort Baker, Cal., for duty.

Wing, F. F., dental surgeon, returned to Fort D. A. Russell, Wyo., from temporary duty at Fort Robinson, Neb.

Stallman, George F., dental surgeon, reported for temporary duty at Fort McIntosh, Tex.

Dickenson, Clarence F., M.R.C., on abandonment of Fort Duchesne, Utah, will proceed to Whipple Barracks, Ariz., for duty.

Carels, Leon C., lieut., relieved from treatment at Letterman General Hospital, San Francisco, and to return to the Philippine Islands.

Betts, Charles A., M.R.C., on expiration of leave of absence ordered to Fort William H. Harrison, Mont., for temporary duty.

Medical Corps, U. S. Navy

Changes during the week ended Jan. 20, 1912.

Rose, M. E., A. A. surgeon, appointed acting assistant surgeon from Jan. 12, 1912.

Changes during the week ended Jan. 27, 1912.

Hayward, A. B., P. A. surgeon, detached from the *South Dakota* and ordered to the *Maryland*.

Diehl, Oliver, medical director, detached from the naval hospital, Newport, R. I., and ordered to the navy recruiting station, Philadelphia.

Nash, F. S., medical inspector, detached from the navy recruiting station, Philadelphia, and ordered to the naval hospital, Newport, R. I.

Stone, E. P., medical inspector, ordered to the marine recruiting station, Denver.

Baker, M. C., P. A. surgeon, detached from the naval hospital, Mare Island, Cal., February 5, and ordered to the *Colorado*.

Valz, E. V., P. A. surgeon, detached from the naval hospital, Mare Island, Cal., February 5, and ordered to the *South Dakota*.

Brown, H. L., P. A. surgeon, detached from the *Baltimore* and ordered to the naval hospital, Norfolk, Va.

Stoops, R. E., P. A. surgeon, ordered to the naval disciplinary barracks, Port Royal, S. C.

Bacon, Sankey, P. A. surgeon, detached from the naval disciplinary barracks, Port Royal, S. C., and ordered to the *Baltimore*.

Mink, O. J., P. A. surgeon, detached from the *West Virginia* and ordered to the naval station, Guam.

Hayes, Oscar, A. A. surgeon, detached from the marine recruiting station, Denver, and ordered to the marine recruiting station, St. Paul.

Rose, M. E., A. A. surgeon, ordered to the marine recruiting station, Buffalo.

Medical Economics

THIS DEPARTMENT EMBODIES THE SUBJECTS OF POSTGRADUATE WORK, CONTRACT PRACTICE, LEGISLATION, MEDICAL DEFENSE, AND OTHER MEDICOLEGAL AND ECONOMIC QUESTIONS OF INTEREST TO PHYSICIANS

WHY THE PRACTICE OF THE SPECIALTIES SHOULD BE CONTROLLED

Emil Amberg, M.D.
DETROIT

At the present time any person who chooses to call himself a specialist may do so. The only restriction lies in the character of the individual: This fact includes, it is true, a high tribute to the integrity of the specialist and, from the standpoint of individualism, this condition represents the highest type of development. From the standpoint of a well-regulated and well-governed community it represents anarchy. Anarchy, according to Webster, is "absence of government; the state of society where there is no supreme power; hence, a state of lawlessness or political disorder. . . ." It is scarcely necessary to be reminded of an almost anarchistic state of affairs in regard to the practice of medicine, which lies within our memory. Whether the regulations of the license to practice medicine in general are as good as they should be, or whether there is much opportunity for improvement, is a question familiar to all of us. We can say, however, that something is being done continually in this direction, and the progress within the last few years is commendable and encouraging. Gradually a number of physicians have undertaken obligations distinctly different from the general duties of medical practice. They confined themselves to certain branches of medicine, excluding all others. This specialization involves special preparation and application to the special branch in medicine. We are confronted with the question, to what extent the supervision of the state is applied to the practice of the specialties. The answer is as simple as it is dumfounding. It is evident that a state board of medical licensure, a body on which devolves the control of medical practice, must exercise this control not only in name but in fact. I do not know of a single instance in which such a responsible board has even asked for evidence of knowledge and fitness in regard to the practice of the specialties.

While these ideas may, and I hope will, be accepted generally, the question arises, Where shall all the specialists receive such training which should include hospital service? This might be given in the various medical centers, in special hospitals or in special departments of general hospitals, which should furnish the opportunity for such a special education. We have, of course, postgraduate schools which can aid in the instruction; especially is this done at present also in one of the foremost medical postgraduate schools, the Allgemeine Krankenhaus, in Vienna. Yet, only in exceptional cases, and by a long stay, can the whole instruction be received in such centers for postgraduate instruction. The main work should be done as assistant or intern in a hospital.

About ten years ago[1] I called attention to the fact that one cannot become proficient in a specialty in a few weeks; I demanded that before being allowed to practice a specialty and make it known, one should give proper evidence, either to a state board or to some recognized medical society, of the qualifications for doing so. Special attention was called to the question how the many eye, ear, nose and throat specialists acquired their knowledge and received their training. A knowledge of these specialties cannot be acquired from the mere study of books, but it is imperative that thorough personal instruction should be received in these branches, and it can be given only by actual training.

Recently, Dr. R. B. Canfield of Ann Arbor has called attention to the "Clinical Specialist, His Preparation and Relationship to the General Practitioner,"[2] and *American Medicine*,[3] editorially, commented on conditions existing and asked for their early correction, emphatically condemning the pernicious practice of inefficient and premature specialists. Since September last year I have endeavored to arouse the interest of the profession in this question again. I am well aware how difficult it is to awaken the interest of a greater part of the profession in some questions, even if they are of very great importance to the public and to themselves, if the question is somewhat complicated, unless an immediate result is plainly visible. This, however, should not deter those who have an insight in questions of this nature from coming forward and helping to emphasize subjects the importance of which they recognize. They should keep them ever uppermost in the minds of the medical profession until they have succeeded in convincing others that something must be done in the interest of all which will regulate anomalous conditions. I may add that in September, 1911, the Wayne County (Detroit) Medical Society instructed its delegates to the Michigan State Medical Society to ask the latter to appoint a committee to study the question and make suggestions.

There is one point which should not be lost sight of in agitating this question. Even if nothing is accomplished in the near future, the prospective specialist will know that the great body of the medical profession is aware of the situation, and he will see to it that his preparation will be more complete.

270 Woodward Avenue.

1. Amberg, E.: Philadelphia Med. Jour., March 22, 1902.
2. Physician and Surgeon, November, 1911.
3. December, 1911.

POSTGRADUATE COURSE FOR COUNTY SOCIETIES

Sixth Month—Second Weekly Meeting

SECONDARY ANEMIA

ETIOLOGY: (a) Hemorrhage. Many causes. Rate and amount of hemorrhage. Age and sex. Recovery, elements restored. (b) Inanition. Lack of quantity or quality of food. Local causes. Elements reduced. (c) Excessive albuminous discharges. Chronic nephritis, prolonged suppuration, lactation, etc. (d) Toxic agents. Organic or inorganic poisons. Metallic poisons, course, elements involved. Acute and chronic infections. Pyrexia.

MICROSCOPIC CHANGES: Red corpuscles, oligocythemia, changes in shape and color, staining reactions, nucleated cells. Reduction and distribution of hemoglobin. Changes in white cells, increase and reduction. Reduction in blood-plasma.

CHLOROSIS[1]

ETIOLOGY: Age and sex. Heredity. Unhygienic surroundings. Copremia. Emotions.

SYMPTOMS: Onset, complexion, respiratory and circulatory disturbances, digestive disorders.

MICROSCOPIC CHANGES: Oligocythemia moderate, oligochromemia marked. Size, shape and irregularities of red cells. Leukocytes.

PERNICIOUS ANEMIA[2]

PATHOLOGIC ANATOMY: Skin and subcutaneous fat. Heart, blood-vessels and hemorrhages. Liver, spleen, lymph glands. General fatty degeneration, deposits of iron pigment. Changes in bone marrow.

Changes occurring in "aplastic anemia."[3]

SYMPTOMS[4]: Insidious onset, general symptoms, respiratory and circulatory disturbances, gastro-intestinal symptoms.

BLOOD EXAMINATION: Marked oligocythemia, color index, macrocytes, microcytes, poikilocytes, normoblasts, megaloblasts.

LEUKOPENIA: Changes in white cells. Blood-plates.

DIAGNOSIS: Differentiate from Addison's disease, nephritis, heart-disease, malignancy.

1. Cabot: THE JOURNAL A. M. A., Aug. 24, 1907.
2. Emerson: Johns Hopkins Hospital Bulletin, February, 1907; Progressive Medicine, June, 1911, p. 259. Grawitz: Medical Record, Oct. 29, 1910. Crofton: THE JOURNAL A. M. A., Aug. 13, 1910.
3. Thomas: British Medical Journal, Jan. 1, 1910. Lavenson: Am. Jour. Med. Sciences, January, 1907; Progressive Medicine, June, 1907 and 1908.
4. Melland: British Medical Journal, June 5, 1909.

Medical Education and State Boards of Registration

COMING EXAMINATIONS

IOWA: Capitol Bldg., Des Moines, February 6-8. Sec., Dr. Guilford H. Sumner, State House.

KANSAS: National Hotel, Topeka, February 13. Sec., Dr. H. A. Dykes, Lebanon.

NEBRASKA: State House, Lincoln, February 14-15. Sec., Dr. E. Arthur Carr, 141 S. 12th Street.

Meeting of Confederation of Licensing Boards

Dr. George H. Matson, secretary of the National Confederation of State Medical Examining and Licensing Boards, announces that the twenty-second annual meeting of that organization will be held in Chicago, Thursday, February 29. This confirms the tentative announcement to that effect which appeared in THE JOURNAL, Jan. 13, 1912, page 135.

The American Medical Association's joint conference on medical education, legislation and public health will be held at the Congress Hotel, Chicago, Monday and Tuesday, February 26 and 27. It is also reported that the Association of American Medical Colleges will hold its annual meeting in Chicago, Wednesday, February 28. The programs will include topics of extreme importance to the cause of medical education.

California December Report

Dr. Charles L. Tisdale, secretary of the Board of Medical Examiners of the State of California, reports the written examination held at Los Angeles, Dec. 5-8, 1911. The number of subjects examined in was 10; total number of questions asked, 100; percentage required to pass, 75. The total number of candidates examined was 143, of whom 99 passed, including 16 osteopaths, and 44 failed, including 19 osteopaths. The following colleges were represented:

College	Year Grad.	Per Cent.
PASSED		
Cooper Medical College	(1911)	81.7
University of California (1910) 89.2; (1911) 78.1, 84.6, 85.7, 86.2, 87.5.		
College of Phys. and Surgs., Los Angeles	(1911)	76, 91.6
College of Phys. and Surgs., San Francisco	(1910)	79
George Washington University	(1910)	80.7
Bennett Medical College	(1908) 85.5; (1911)	77.4
College of Physicians and Surgeons, Chicago (1903) 82.3; (1910) 79.8, 79.8.		
American Med. Missionary College	(1899) 91.5; (1903)	81.4
Rush Medical College (1881) 88.9; (1899) 91.4; (1896) 90.2; (1903) 76.4; (1903) 83.4; (1911) 82.1, 89.6.		
Northwestern University Medical School (1879) 85.7; (1908) 91.2; (1911) 80.3, 81, 81.1, 83.4, 85.9.		
State University of Iowa, College of Medicine	(1910)	76.2, 86.5
College of Physicians and Surgeons, Keokuk	(1897)	84
State University of Iowa, Homeopathic College	(1910)	81.3
Louisville Medical College	(1906)	77.6
Kentucky School of Medicine	(1891)	81.2
Tulane University of Louisiana	(1907)	85.5
Medical School of Maine	(1909) 75; (1911)	78.7
Johns Hopkins University	(1904)	87.4
Harvard University	(1900)	85.3
Baltimore Medical College	(1903)	80.2
College of Physicians and Surgeons, Baltimore	(1910)	78.3
University of Michigan, College of Med. and Surg., (1894) 80, 90.3; (1903) 85.1; (1904) 87.2; (1905) 78.6; (1911) 89.4.		
University of Minnesota, College of Medicine	(1903)	78.1
Kansas City Medical College	(1880)	98.1
Missouri Medical College	(1899)	88.5
Barnes Medical College	(1900)	91.8
St. Louis University	(1906) 80.2; (1908)	80.3
Columbia University College of Physicians and Surgeons (1894) 88.1; (1909) 91.		
Albany Medical College	(1907)	81.8
University and Bellevue Hospital Medical College	(1902)	82.1
Cornell University Medical College	(1903) 91; (1909)	91.8
Syracuse University	(1891) 78.9; (1898)	88.2
Cleveland Coll. of P. and S.	(1907) 75.7; (1911)	81.5
Western Reserve University	(1902)	82.2
Ohio Medical University	(1898)	77.8
Medical College of Ohio	(1896)	85.9
Medico-Chirurgical College of Philadelphia	(1904)	85
University of Pittsburgh	(1910)	83.9
University of Pennsylvania (1902) 85.8; (1905) 78.7; (1906) 82.9; (1911) 83.9.		
Jefferson Medical College	(1909)	82.4
Woman's Med. Coll. of Pennsylvania	(1908) 79.7; (1911)	92.4
Royal University of Turin, Italy	(1906)	78
Royal College of Phys. and Surgs., England	(1904)	90.5
University of Athens, Greece	(1902)	79.1
Royal College of Medicine, Edinburgh, Scotland	(1883)	85.2
FAILED		
College of P. and S., Chicago	(1893) 31.4; (1895)	52.6
Northwestern University Medical School	(1880)	*77.2
Hering Medical College	(1910)	71
Rush Medical College	(1883)	65.8
Medical College of Indiana	(1902)	71.3
Sioux City College of Medicine	(1904)	58.6
College of Physicians and Surgeons, Keokuk	(1882)	64.2
University of Louisville	(1905)	50.8
Maryland Medical College	(1911)	51.5
College of Physicians and Surgeons, Baltimore	(1882)	54.9
Univ. of Michigan, Coll. of Med. and Surg.	(1892)	72.5
University of Minnesota, College of Medicine	(1903)	67.5
Medico-Chirurgical College of Missouri	(1903)	70.5
Missouri Medical College	(1898)	62.6
American Medical College, St. Louis	(1898)	62.4
Marion-Sims Beaumont Medical College	(1902)	67.4
St. Louis University	(1906)	69.5
Columbia Univ., Coll. of Phys. and Surgs.	(1896)	68.4
University of Oregon	(1905)	68.9
Mcharry Medical College	(1904)	59.8
University of Nashville	(1909)	71.3
University of Athens, Greece	(1899)	59.7
Royal University of Naples	(1903)	51.2, 67.8

* Fell below 60 per cent. in one or more branches.

Book Notices

TECHNIK DER THORAXCHIRURGIE. Von Dr. F. Sauerbruch, Professor, Direktor der Chirurg. Universitätsklinik Zurich und Dr. E. D. Schumacher, Privatdozent, Assistent an der Chirurg. Universitätsklinik Zurich. Cloth. Price, 24 marks. Pp. 97, with 73 illustrations. Berlin: Julius Springer, 1911.

The work is divided into two parts, general and special. In the first part are considered the apparatus and instruments used, the preliminary preparation of the patient and the general technic of operating. The various devices which have been invented to permit respiration and anesthetization to be carried on when the chest cavity is open are illustrated and described and the advantages and disadvantages of each clearly set forth. As is well known, one of the authors, Sauerbruch, is the inventor of one of the devices and therefore favors the large operating chamber in which the patient is placed and in which the operator and his assistants work. The pressure in the chamber is diminished until the lung remains expanded when the chest is opened.

The other devices mentioned are so constructed as to permit the patient to breathe air under increased pressure so that the lung is kept distended. It is probable that all of these devices are too complicated and cumbersome to ever be widely used. The simpler method of insufflation of Meltzer and others is not described, as the authors say that they have had no experience with it. It is quite certain that the simpler methods are the ones which will eventually come into general use in operative work within the thorax.

In the special part are considered the various intrathoracic operations on the lungs, heart, esophagus, thymus gland, etc. The illustrations, most of which are full-page plates in colors, constitute an excellent feature of this part of the work. The work as it now stands simply presents a good description of the various devices used and of the classical operations which can be performed within the thorax. Much increased value would have been given to the work had some evidence been added in the shape of concrete cases, showing what had actually been accomplished in this line of work on the human subject.

INDEX-CATALOGUE OF THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE, UNITED STATES ARMY. Authors and Subjects. Second Series, Volume 16, Skinko-Stysanus. Cloth. Pp. 882. Washington, 1911.

The sixteenth volume of the second series of this index-catalogue contains 9,800 author titles, representing 4,670 volumes and 10,786 pamphlets, together with 3,892 subject-titles of separate books and pamphlets, and 24,135 titles of articles in periodicals.

DIE METHODEN DER UNTERSUCHUNG DES MAGENS UND IHRE DIAGNOSTISCHE VERWERTUNG. Von Dr. Emil Schütz, Privatdozent an der Universität Wien. Paper. Price, $2.75. Pp. 240, with 29 illustrations. New York: Rebman Co., 1911.

This is a most interesting and complete monograph. It includes all of the various reliable methods which may be employed in the effort to establish a correct diagnosis of gastric disturbances. The various fallacies as well as the futility of many of these tests are pointed out and their bearing on the question of differential diagnosis is discussed at great length. An especially instructive section deals with

the biologic methods applied to the diagnosis of carcinoma of the stomach and the point is well made that none of these are satisfactory. Other sections treat of the relation of the blood and urinary changes to gastric diagnosis and, also, of the application of Roentgen rays to such studies. The style is clear and concise. The methods discussed are the well-established ones. The illustrations, while adequate, might be much improved. This work is commended to those who may wish a book on methods of gastric diagnosis, which is especially complete and critical in its interpretation of the methods employed.

Medicolegal

Liability for Malarial Fever and from Unhealthful Nuisances

(A. Cohen & Co. vs. Rittimann (Tex.), 139 S. W. R. 59).

The Court of Civil Appeals of Texas first affirmed, then, on a rehearing, reverses a judgment for damages obtained by Rittimann for the death of a daughter from malarial fever complicated with asthma, which, as to the malarial fever, it was sought, in one way or another, to prove was due to the way that the defendant conducted the business of curing hides, filling the surrounding atmosphere with noxious odors and producing a pest of flies.

In its first opinion, the court said that unhealthiness, pain and sickness resulting from a nuisance are elements of damages, and those suffering in that way from a nuisance are entitled to recover therefor. The defendant may have had authority from the city to carry on the business of curing hides in the locality where he was engaged in such business, but the city did not, and could not, authorize him to engage in a business that would injure the lives, health or property of owners of property in the vicinity. And the fact that the plaintiff moved into proximity of the hideyard after it had been erected and the business was being carried on would not preclude him from a recovery of damages arising from the nuisance. Neither was it a defense that the business was a necessary one and useful to the public.

On the rehearing, the court says that the evidence indicated that the premises were not kept in as cleanly a condition as such places can be kept, and that the only question was whether it was shown that the stench and filth created by the defendant were a concurring cause with malaria in producing the death of the plaintiff's daughter. The court thought in delivering its former opinion that perhaps there was testimony on which a jury could find that the vile odors and stench were a concurring cause, but it now believes that the evidence was insufficient.

It was true that vast swarms of flies were bred about the hideyard and invaded the surrounding houses, and that one physician testified that "flies can communicate always anything that is carriable, that is transportable on their bodies"; but it cannot be inferred from that testimony that malaria, which is communicated through the veins and arteries, could be carried on the body of a fly, and communicated as is typhoid fever, an intestinal fever, by being deposited in food or drink, and by that means carried into the stomach and intestines. The medical theory of modern times is that a certain species of mosquito filled with malarial fever germs pricks the skin of a human being, inoculates the blood with the germs, and in due course of time the fever may appear. The court therefore infers that the witness did not intend to create the impression that malaria is borne by flies on their bodies, and by that means the disease is communicated to men, for the court understands it to be the theory, and one firmly established by the facts, that malaria is never communicated to a human being except through the medium of female anopheles, a species of mosquito. The evidence in this case tended to show that no mosquitoes were bred in or about the hideyard, but that they might have come from pools in a creek near the plaintiff's house, and that the plaintiff was not responsible for the malarial fever.

Current Medical Literature

AMERICAN

Titles marked with an asterisk (*) are abstracted below.

United States Naval Medical Bulletin, Washington, D. C.

January 6, No. 1, pp. 1-160

1 Medical Man and Vital Statistics. J. D. Gatewood, U. S. N.
2 Plea for More Liberal Nomenclature for Naval Medical Service. A. W. Dunbar, U. S. N.
3 *Acid-Fast Bacilli in Circulating Blood of Lepers. G. B. Crow, U. S. N.
4 Relation of Second Hague Conference (1907) to Evacuation of Wounded in Naval Warfare. F. L. Pleadwell, U. S. N.
5 *Study of 3,268 Venereal Prophylactic Treatments. R. C. Holcomb and D. C. Cather, U. S. N.
6 Experience in Venereal Prophylaxis on Board U. S. S. *Georgia*, July 1, 1910, June 30, 1911. C. L. Moran, U. S. N.
7 Recent Advances in Prophylaxis and Treatment of Typhoid. M. W. Baker, U. S. N.
8 Naval Medical School Collections. P. E. Garrison, U. S. Navy.
9 Improved Cot for Hospital Ships and Sick Bays Aboard Ship. E. M. Blackwell, U. S. Navy.
10 Umbilical Hernia. H. F. Strine, U. S. Navy.
11 Case Resembling Gangosa in Which Treponema Pertenuis Was Present. P. S. Rositer, U. S. Navy.
12 Bunion Operations. A. M. Fauntleroy, U. S. Navy.
13 Late Positive Wassermann in Syphilis and Tuberculosis. W. B. Grove, U. S. Navy.
14 Salvarsan in Filariasis. G. F. Cottle, U. S. Navy.
15 Salvarsan in Frambesia. G. F. Cottle, U. S. Navy.

3. **Acid-Fast Bacilli in Circulating Blood of Lepers.**—Crow believes that leprosy bacilli may be found in the circulating blood of lepers in 80 per cent. of cases and possibly in every case, if sufficient care and diligence is used in the examination. The organism is in some cases extremely difficult to demonstrate. It is most easily found in the rapidly progressive tubercular type.

5. **Venereal Prophylactic Treatments.**—The 3,268 treatments for the prevention of venereal disease were given between May 1, 1910, and August 31, 1911. They are considered to be a fair index of the results of venereal prophylaxis. The treatment is as follows: 1. Wash the penis, head, shank and under frenum with 1-5,000 bichlorid of mercury solution with a cotton sponge. 2. Pass water. Take urethral injection of 2 per cent. protargol solution and hold to count 60. 3. Rub 50 per cent. calomel ointment well into foreskin, head and shank of penis, with particular care about the frenum. Treatment taken within eight hours after exposure in 1,385 cases shows nineteen infections, or but 1.37 per cent. In the interval of from eight to twelve hours after exposure in 741 cases shows twenty-five infections, or 3.31 per cent. Between twelve and twenty-four hours in 920 cases shows forty-six infections, or 5 per cent. Of the fifty-six cases of gonorrhea occurring in the first twenty-four hour interval, twenty-six were recurrent cases; the remaining thirty were primary infections. There were 1,385 exposures in which the treatment was taken within the first eight hours and among these men there were nineteen infections, or 1.37 per cent. There were 731 exposures in which the treatment was taken in the interval of eight to twelve hours after exposure and among these men there were twenty-five infections, or 3.41 per cent. There were 920 exposures in which the treatment was taken in the interval of twelve to twenty-four hours after exposure and among these men there were forty-six infections, or 5 per cent. In the first instance one man out of every 72.9 contracted an infection; in the second period one man out of every 30.2; in the third instance one man out of every twenty.

Maryland Medical Journal, Baltimore

December, LIV, No. 12, pp. 335-360

16 Breast Affections in 100 Cases. R. Winslow and N. Winslow, Baltimore.
17 Acetone in Inoperable Cancer of Uterus. A. Samuels, Baltimore.
18 Some Tendencies in Medical Education in United States. L. F. Barker, Baltimore.

January, LV, No. 1, pp. 1-26

19 Intravenous Administration of Salvarsan. S. H. Likes and H. Schoenrich, Baltimore.
20 Some Facts General Practitioner Ought to Know About Tonsils and Tonsil Operations. J. R. Winslow, Baltimore.
21 Prophylactic Inoculation Against Typhoid. F. W. Hachtel and H. W. Stoner, Baltimore.

V. 5 1912

Cleveland Medical Journal.

December, X, No. 12, pp. 976-1076

22 *Profuse Recurrrent Gastric Hemorrhage, with Description of Instrument for Viewing Gastric Interior at Operation. F. C. Herrick, Cleveland.
23 Application of Roentgenoscopy in Study of Intrathoracic Diseases. G. F. Thomas, Cleveland.
24 Ortnodontia in Malformation of Dental Arches and Maxillæ. F. M. Casto, Cleveland.
25 Suppuration of Middle Ear with Some of Its Complications. S. H. Large, Cleveland.
26 Diagnosis of Acute Conditions of Upper Abdomen. J. Phillips, Cleveland.
27 Pharmacopeia from Therapeutic Standpoint. M. J. Lichty, Cleveland.
28 Acidosis. C. H. Lenhart, Cleveland.
29 Treatment of Stuttering and Stammering and Voice Defects Through Science and Art of Speech and Singing. B. Cadwallader, Cleveland.
30 Herpes of Larynx and Pharynx: Report of Case. D. A. Prendergast, Cleveland.
31 Use of Salvarsan. F. E. Cutler, Cleveland.

22. **Gastric Hemorrhage.**—After exposure of the stomach through as small an incision as feasible, Herrick places a purse-string suture an inch in diameter five or six inches from the pylorus. An incision is made, and the instrument, devised by him—a large direct vision cystoscope—is introduced and the purse-string tied about it with a bow knot sufficiently tight to prevent the escape of gastric contents. The light carrier is introduced, the eye-piece screwed on, the stomach slightly inflated, sufficiently only to keep its walls apart, the light turned on and the inspection begun. Herrick says that in this manner an ulcer or bleeding point of small size which would be discoverable otherwise only by chance can readily be found. This instrument is said to render inspection of the gastric interior far safer, without danger of soiling the peritoneum and with less injury to the stomach, than the usual method of inspection through a long anterior incision.

New Orleans Medical and Surgical Journal

December, LXIV, No. 6, pp. 441-590

32 Muscle Tucking Operation in New Orleans. T. J. Dimitry, New Orleans.
33 Administration of Nitrous-Oxid-Ether Sequence by Open Method. A. M. Caine, New Orleans.
34 Prolapse of Uterus. W. Kohlmann, New Orleans.
35 Epistaxis. A. I. Well, New Orleans.

Journal of Infectious Diseases, Chicago

January, X, No. 1, pp. 1-128

36 *Pyemia Due to Anaerobic Polymorphic Bacillus, Probably Bacillus Fusiformis. E. C. Rosenow and R. Tunnicliff, Chicago.
37 Cell Content in Milk. H. E. Ross, Ithaca, N. Y.
38 Bacillus Muris as Etiologic Agent of Pneumonitis in White Rats and Its Pathogenicity for Laboratory Animals. O. W. H. Mitchell, Columbia, Mo.
39 *Action of Staphylococcus Aureus on Klebs-Loeffler Bacillus. L. M. DeWitt, St. Louis.
40 Generalized Infection with Diphtheroid Organism. L. M. DeWitt, St. Louis.
41 Fixation of Soluble Antigen by Tissues. R. T. Pettit and A. J. Carlson, Chicago.
42 *Antipneumococcal Powers of Blood in Pneumonia. H. E. Eggers, Chicago.
43 Venom Hemolysis. v. Dungern and A. F. Coca, New York.
44 A Plague-Like Disease of Rodents Caused by Bacterium Tularense. G. W. McCoy and C. W. Chapin, U. S. P. H. and M.-H. S.
45 Outbreak of Tonsillitis or Septic Sore Throat in Eastern Massachusetts and Its Relation to Infected Milk Supply. C. E. A. Winslow, New York.
46 *Production of Anaphylatoxic Substances by Autolysis of Bacteria and Their Relations to Endotoxins. E. C. Rosenow, Chicago.

36. **Pyemia Due to Anaerobic Polymorphic Bacillus.**—The authors believe that it has been their good fortune to see the first fatal general infection caused by the *Bacillus fusiformis*. The essential facts of the clinical history are as follows: The patient, a middle-aged man, died from pyemia following an attack of appendicitis. Early operation was refused. An operation five weeks later revealed a small pericecal abscess containing a sloughed appendix. Drainage at this time failed to check the septic temperature which the patient had had for some time previously and which continued until death six weeks later. Repeated blood examinations showed a leukocytosis of from 14,000 to 22,000. Three blood cultures were negative. Of these the third was kept under anaerobic conditions. A number of needle punctures of the liver failed to show liver abscess. One month before death metastatic abscesses began to appear over the thigh and tibia and two weeks before death the patient coughed up a large amount of a foul smelling pus. Microscopic examination of stained smears of the pus obtained from the abscess of the tibia before and after death, from a large abscess in the left lung and a retrocecal abscess after death and from infarcts, showed an organism which proved to be the *Bacillus fusiformis*.

39. **Action of Staphylococcus Aureus.**—Test-tube experiments by DeWitt with fifteen different strains of Klebs-Loeffler bacilli show that there is no inherent antagonism or incompatibility between *Staphylococcus aureus* and the Klebs-Loeffler bacillus. Experiments on animals with twenty-four different strains of diphtheria organisms show that in 40 per cent. of the cases the animals treated with *Staphylococcus aureus* got rid of their diphtheria organisms more quickly than did the untreated animals, while in 60 per cent. the cultures gave Klebs-Loeffler bacilli either the same time or longer. The clinical symptoms on the other hand were less severe in only 32.5 per cent. of the animals treated with staphylococcus; as in the six patients treated by Schiotz and the one by Page, the throat culture in his cases which had been persistently positive for Klebs-Loeffler bacilli quickly became negative. It would therefore seem advisable and effective to treat slowly convalescing diphtheria cases and diphtheria carriers with *Staphylococcus aureus* culture.

The animal experiments would indicate that a certain percentage of acute cases might clear up more quickly under the staphylococcus treatment than under the ordinary antiseptic treatment. The animal experiments, however, also indicate that it would not be always altogether safe and frequently not successful to use the staphylococcus treatment before the mucous membrane of the throat has become intact so that it may protect the patient against invasion of the deeper tissues by the pyogenic organisms; hence it seems to DeWitt that the treatment should not be used in acute cases, as Page advises, but only in those in which the diphtheria bacilli persist after the throat has healed and the patient is clinically well. Two negative cultures are not always sufficient for a discharge, especially after this treatment, as the diphtheria bacilli may reappear after an apparent disappearance. The reason for the apparently favorable action of *Staphylococcus aureus* on chronic diphtheria cases seems to be, not an antagonism or incompatibility between the two organisms, but an effort to reinforce the favorable, friendly throat flora in the cases in which they are unable to regain their natural, normal ascendency.

42. **Antipneumococcal Powers of Blood in Pneumonia.**—In most of the cases of lobar pneumonia studied by Eggers, he obtained by the plate method distinct evidence of increased antipneumococcal power, as a rule, greatest at or just after the onset of crisis, and lasting for variable periods afterward. He concludes that the antibodies are apparently in part at least opsonins and their activity can be manifested in proper circumstances even with organisms of some degree of virulence. The cases in which this apparently characteristic increase of antipneumococcal power did not occur presented irregularities either in course or termination.

46. **Production of Anaphylatoxic Substances.**—Rosenow found that when the *Streptococcus pyogenes*, the *S. mucosus*, the meningococcus, the gonococcus, the typhoid bacillus, the colon bacillus, and the spirillum of Metchnikoff are suspended in sodium chlorid solution the latter becomes very toxic at a certain period of autolysis. The time the acutely toxic substance appears in solution is directly proportionate to the activity of the autolytic ferment and the rate of disintegration of the microorganisms. In case of the *S. aureus*, in which little or no proteolysis took place, no toxic effect could be obtained with extracts in sodium chlorid solution alone, but when treated with washed leukocytes or serum the toxic substance is readily brought in solution. Extracts of the pyocyaneus bacillus, while toxic, never killed by producing symptoms resembling anaphylaxis. The symptoms and postmortem appearances produced by the injection of the previously formed bacterial anaphylatoxic substance, whether by autoly-

sis in sodium chlorid solution, or by the action of leukocytes, or by treatment with immune and then with normal serum, or by a combination of these methods, either in the peritoneal cavity of guinea-pigs, or by the injection of filtrates of serum and serum broth cultures when proteolysis has reached a certain stage and the immediate symptoms and changes following the second injection of protein in sensitized guinea-pigs, are identical. The acute death in each instance is asphyxia due to bronchial spasm.

Journal of Oklahoma State Medical Association, Muskogee

January, IV, No. 8, pp. 317-354

47 Treatment of Pelvic Abscess. W. E. Dicken, Oklahoma City.
48 Preventable Causes of Death in Early Infancy. E. V. Davis, Chicago.
49 Nasal Obstructions. J. H. Barnes, Enid.
50 Place of Psychotherapy in Healing Art. A. H. Steward, Lawton.
51 Successful Obstetrician. G. R. Gordon, Wagoner.
52 Value of Uterine Hemorrhage as Symptom. J. A. Hatchett, El Reno.

Journal of Nervous and Mental Disease, Lancaster, Pa.

January, XXXIX, No. 1, pp. 1-72

53 *Malignant Chordoma, Involving Brain and Spinal Cord. S. E. Jelliffe and J. H. Larkin, New York.
54 Tumor Involving Base and Substance of Left Temporal Lobe. F. X. Dercum, Philadelphia.
55 *Differential Diagnosis Between Manic-Depressive Psychosis and Dementia Præcox. A. Gordon, Philadelphia.

53. **Malignant Chordoma.**—This is said to be the seventh fatal case on record. A young woman, 36 years of age, with negative heredity, no history of infection and in previous good health, suddenly developed sixth nerve palsy on left side. She then had headache and pains in the region of the left trigeminus, then developed total internal and external ophthalmoplegia and signs of pressure on the optic tracts with blindness first in one eye and then in the other, with marked bulbar chemosis of the left eye. There was a loss of tendon reflexes of both lower extremities. This was the situation after four months when the first complete examination was made that indicated the presence of a foreign body pressing on the structures at the base of the brain. There was gradually increasing somnolence, with confusion and dreamy delirium; then a left facial palsy came in and a total left hemiplegia with hemianesthesia within the next month. Fifth nerve palsy supervened, both sensory and motor, of the left side, and there was a gradually developing paraplegia, with total loss of all functions. Involuntary urination and defecation were constant. To the marked left-sided chemosis there were added an equally persistent right-sided chemosis and right ptosis and some slight impairment of hearing. Hallucinations of sight, of hearing and finally of smell developed. Vomiting was irregularly present throughout. Finally, there was a sanguineous discharge from the right nostril, and after eight months of patient and terrible suffering, the patient died exhausted.

The autopsy, of the brain only, was performed the same evening and showed a tumor formation, which at first was taken to be a degenerated myosarcoma, but which, on microscopic examination proved to be a chordoma.

55. Abstracted in THE JOURNAL, July 19, 1911, p. 418.

Bulletin of Medical and Chirurgical Faculty of Maryland, Baltimore

January, IV, No. 7, pp. 165-120

56 In These Days of Specialism What Is Left for the General Practitioner? W. T. Watson, Baltimore.
57 Specialism from Obstetrician's Point of View. J. M. H. Rowland, Baltimore.
58 Specialism from Standpoint of the Laryngologist. R. H. Johnston, Baltimore.
59 Specialism as Viewed by the Ophthalmologist. H. Harlan, Baltimore.
60 Specialism as Viewed by a Surgeon. R. B. Warfield, Baltimore.

Philippine Journal of Science, Manila

October, VI, No. 4, pp. 259-341

61 Comparative Study of Amebæ in Manila Water-Supply in Intestinal Tract of Healthy Persons and in Amebic Dysentery. E. L. Walker, Manila.
62 *Immunity Reactions with Amebæ. A. W. Sellards, Manila.
63 *Typhoid in Philippine Islands. W. P. Chamberlain, Manila.
64 Wassermann Reaction in Syphilis, Leprosy and Yaws. H. D. Bloombergh, Manila.

62. **Immunity Reactions With Amebæ.**—The injection of cultures of amebæ into rabbits by Sellards resulted in the production of serum which was cytolytic for amebæ. This serum possessed only a low grade of activity. No inactivation resulted after exposure to a temperature of 60 C. for periods varying from thirty minutes to three hours, or 70 C. for thirty minutes. However, the antibodies of the serum were not proved to be thermostable, since normal serum became active when heated for one hour at 60 C. Of the sera produced by four cultures of amebæ obtained from parasitic and from saprophytic sources each serum was cytolytic for the corresponding culture but not for the other three. This specificity indicates that these amebæ are biologically distinct. Subsequent examination showed that these amebæ are also distinguishable from each other on a morphologic basis. Examination of the sera of amebic dysentery patients failed to demonstrate any production of immune bodies for amebæ during the course of the disease. However, the method which was employed was not satisfactory when applied directly to amebæ occurring in bloody mucous stools. Consequently, the results do not represent any reaction on amebæ which are known to be pathogenic. Tests on cultures of amebæ did not give any definite evidence of the presence of either cytolysins or agglutinins in the patient's serum. Sellards says that unfortunately these results do not lead to any definite conclusion but merely indicate that either immune bodies were not produced or that the cultures under consideration do not bear any etiologic relationship to amebic dysentery. Certainly there is no evidence of pathogenicity; on the other hand, there is nothing but negative evidence indicating their harmlessness.

63. **Typhoid in Philippines.**—This extended and thorough study by Chamberlain is summarized as follows: Typhoid is a widely scattered and common disease in the Philippines; its incidence in Manila is above the average rate for the United States and is exceeded by only a few of the worst American cities; the average admission rate among American soldiers in the Philippines exceeds that for the troops serving in the United States; medical officers from many regions report its frequent occurrence among the Filipinos. The statistics from the Filipino (native) Scouts show a much lower typhoid rate than for white troops, possibly due to failure to diagnose the atypical cases. Widal reactions performed on the blood of 591 healthy Filipinos suggest a comparatively recent attack of typhoid in about 6 per cent. of adults, but do not indicate that the disease is prevalent in childhood. Many epidemics have occurred among soldiers in the Philippines and three outbreaks among natives have been studied. Epidemics of great severity among the Filipinos are either rare or unnoticed. The occurrence of the disease in the Philippine Islands is quite evenly distributed throughout the year. The incidence is least in the second quarters. The appearance of the Widal reaction in typhoid fever in the Philippines is not as a rule delayed. Paratyphoid organisms are occasionally isolated in the Philippines. The leukocyte count in typhoid remains normal for whites and is slightly increased for natives. The differential count is normal for both races. The mortality for white troops in the Philippine Islands during the last five years has been no higher than at home. It appears somewhat higher for Filipinos but this may be due to failure to diagnose all the mild cases. More than a third of the cases of enteric fever, whether among Americans or Filipinos, are entirely atypical and cannot be diagnosed without laboratory methods. Chamberlain says that over one-half of the cases occurring in the Philippine Islands can be diagnosed clinically and differ in no essential particular from typhoid as seen at home. This is true for both American and Filipino cases.

Mississippi Medical Monthly, Vicksburg

January, XVI, No. 9, pp. 169-188

65 Etiology and Treatment of Eclampsia. J. L. Andrews, Memphis, Tenn.
66 Conservative Treatment of Ruptured Kidney; Recovery. A. W. Rhyne, Beulah.
67 Case of Purpura Rheumatica with Diplococci in Lesion. W. B. Johnson, Greenville.
68 Cranial Surgery. J. W. Barksdale, Winona.

St. Paul Medical Journal, Minn.

January, XIV, No. 1, pp. 1-72

69 Last Illness of Lord Byron: Study in Borderland of Genius and Madness, of Cosmical Inspiration and Pathologic Psychology. J. Knott, Dublin, Ireland.
70 Four Cases of Bilateral Abductor Paralysis of Vocal Cords. H. A. Beaudoux, St. Paul.

West Virginia Medical Journal, Wheeling

January, VI, No. 7, pp. 219-256

71 *Analysis of Cases of Goiter. S. McGuire, Richmond, Va.
72 Recent Surgical Progress. S. M. Mason, Clarksburg.
73 Surgical Shock and Other Distressing Diseases Following Abdominal Operations. A. K. Kessler, Huntington.
74 Lodge Practice and Means of Abolishing It. J. N. Osburn, Martinsburg.
75 Hypnotism as Therapeutic Agent. H. R. Fairfax, McComas.
76 Value of Early Diagnosis in Cases of Mental Disease. J. R. Bloss, Huntington.
77 Sphygmomanometer in Life Insurance. J. L. Dickey, Wheeling.

71. **Analysis of Goiter.**—Of the twenty-three cases in which McGuire operated, three were men and twenty women. The youngest patient was 17 and the oldest 53, the average age being 30. Twelve cases were simple goiter causing only mechanical symptoms. Eleven were of the exophthalmic type attended by marked symptoms of hyperthyroidism. In three cases the operation was on the left lobe, in seventeen on the right lobe and in three on both lobes. The anesthetic employed was cocain in one case, chloroform in five cases and ether in seventeen cases. Cocain was used in the one instance because the patient was obese and had a bad heart. Chloroform and ether were used with equal satisfaction in the other twenty-two cases, the choice of the agent being determined by who was to give it. One patient had some huskiness of the voice for several days. One patient had infection from imperfect drainage of a large cavity left after the dislocation of an intrathoracic goiter. One patient had a severe hemorrhage shortly after recovery from the anesthetic, requiring the wound to be reopened and the bleeding arrested. Two patients had hyperthyroidism, one mildly, the other sharply. They were both over it in thirty-six hours. The average time taken to complete the operation was thirty minutes, the average confinement to bed was seven days, and the average stay in the hospital was two weeks.

The final results were complete cure in the twelve cases of simple goiter where the symptoms were due to mechanical pressure. In the eleven cases of exophthalmic goiter the results were very satisfactory; the exophthalmos or prominence of the eyes was improved in the early cases, but not materially changed in the advanced cases. The nervousness, tremor and rapid heart action were apparently cured in nine cases and markedly improved in the remaining two. Sufficient time has not yet elapsed for them to have received the full benefit of the operation.

Louisville Monthly Journal of Medicine and Surgery, Ky.

January, XVIII, No. 8, pp. 225-256

78 Iodin as Antiseptic. W. O. Roberts, Louisville.
79 Chloroform Habit. A. G. Browning, Maysville, Ky.
80 Hemorrhage in Typhoid. W. F. Boggess, Louisville.
81 Pellagra: Plea for Early Diagnosis. J. D. Trawick, Louisville.

Therapeutic Gazette, Detroit

January 15, XXVIII, No. 1, pp. 1-76

82 Influence of Caffein on Mental and Motor Efficiency. H. L. Hollingworth, New York.
83 *Effects of Caffein on Circulatory and Muscular Systems. H. C. Wood, Philadelphia.
84 Recognition and Treatment of Gonorrheal Infection of Uterus and Its Adnexa. W. E. Ashton, Philadelphia.
85 Treatment of Gonorrheal Complications with Gonorrheal Vaccine Combined. J. L. Boehm, St. Louis.

83. **Effects of Caffein on Circulatory and Muscular Systems.**—The results of Wood's study of the action of caffein on the circulation may be summed up as follows: In therapeutic doses caffein has comparatively little influence on the circulation, but it slightly increases the force of the cardiac contractions, thereby causing some elevation in the general pressure. The pulse-rate is usually not markedly affected, but such change as is produced is rather a retardation than an acceleration. His conclusions concerning the action of caffein on the motor system are: It acts as a stimulant to the reflex centers in the spinal cord; it enables muscle to contract more vigorously without producing a secondary depression, so that the sum total of muscular work which can be done by a man under caffein is greater than that done without it

Journal of Medical Society of New Jersey, Orange

January, VIII, No. 8, pp. 391-448

86 Calcium Sulphid in Infectious Diseases. J. E. Pratt, Dumont.
87 Estimation of Functional Activity of Kidneys. J. C. Tull Atlantic City.
88 Acute Suppurative Otitis Media. G. H. Ward, Englewood.
89 Internal Diseases of Eye. E. J. Marsh, Paterson.
90 Henoch's Purpura. G. F. Boehme, New York.
91 Causes of Postoperative Complications and Early Voluntary Muscular Movements, with Avoidance of Usual Confinement to Bed as Means of Combating Them. W. F. Burrows, New York.
92 High-Frequency Current as Therapeutic Agent. A. C. Geyser, New York.

Medical Herald, St. Joseph, Mo.

December, XXX, No. 12, pp. 531-596

93 Origin and Nature of Exophthalmic Goiter. G. W. Crile, Cleveland.
94 Plea for Early Scientific Examination in All Cases. D. Macrae, Council Bluffs, Iowa.
95 Perineal Prostatectomy. J. T. Axtell, Newton, Kan.
96 Ticks and Calcium Sulphid. R. Powell, East St. Louis, Ill.
97 Chloretone in Control of Anesthesia Sequelæ; Study of Thirty-Nine Cases. W. S. Royce, Chicago.

January, XXXI, No. 1, pp. 1-50

98 *Working Bulletin System and Board of Control Plan for Collecting Evidence Concerning Newer Materia Medica. F. E. Stewart, Philadelphia.
99 Cuba. F. B. Tiffany, Kansas City, Mo.
100 Advantages of Malt Sugar Over Lactose in Infant Feeding. F. C. Neff, Kansas City, Mo.
101 Open Method of Treating Fractures. O. B. Campbell, St. Joseph, Mo.

98. **Working Bulletin System and Board of Control.**—Stewart proposes a board of control and suggests that the personnel of this board be the same as the present committee for the revision of the U. S. Pharmacopeia. The duties of this board to be: (1) The censorship of the advertisements of the medical and pharmaceutical journals. (2) To censor all literature from manufacturing houses, including labels. (3) To determine what materia medica products shall be placed on the market. (4) To determine the therapeutic value of products by collective investigation as represented by the working bulletin system. (5) To cooperate with the Patent Office in the interpretation, application and enforcement of the patent and trademark laws relating to materia medica.

Virginia Medical Semi-Monthly, Richmond

January 12, XVI, No. 19, pp. 469-496

102 *Relation of Medical Profession to People. J. C. Wilson, Philadelphia.
103 Treatment of Tuberculosis in Home. J. J. Lloyd, Lynchburg.
104 Tonsillectomy. L. T. Royster, Norfolk.
105 Cases Treated with Salvarsan. L. T. Price, Richmond.
106 Railway Injuries and Their Treatment. C. W. Doughtie, Norfolk.
107 Doctor Moses. T. W. Murrell, Richmond.
108 Physician's Duty to People. M. L. Dalton, Floyd.

102. Abstracted in THE JOURNAL, Nov. 11, 1911, p. 1638.

Archives of Internal Medicine, Chicago

January, IX, No. 1, pp. 1-127

109 Curability of Idiopathic Epilepsy. L. P. Clark, New York.
110 Criticism of Uskoff Sphygmotonograph. J. Erlanger, St. Louis.
111 *Infantilism in Hypophysis Disease. A. W. Hewlett, Ann Arbor, Mich.
112 *Persistent Patency of Ductus Arteriosus Botalli in Dog. C. Brooks, Pittsburgh.
113 *Variations in Concentration of Blood as Affecting Opsonic Index. H. C. Jackson, New York, and C. B. Hawn, Albany, N. Y.
114 *Study of Blood and Feces Before and After Bilateral Nephrectomy and Double Ureteral Ligation and of Urine Secreted After Reimplantation of Ureters. H. C. Jackson and T. Saiki, New York.
115 *Levulosuria. S. Strouse and J. C. Friedman, Chicago.
116 Blood-Pressure-Raising Substance of Adrenals in Acute Adrenal Insufficiency. J. V. Cooke, New Orleans.
117 *Determination of Individual Dosage in Tuberculin Therapy. W. C. White and K. H. Van Norman, Pittsburgh.

111. **Infantilism in Pituitary Disease.**—Three cases are reported by Hewlett to show that the infantilism associated with disease in or near the pituitary gland may resemble either the Brissaud or the Lorain type of infantilism. A constantly low specific gravity of the urine in patients with such disease may be the equivalent of a mild diabetes insipidus.

112. **Persistent Patency of Ductus Arteriosus Botalli in Dog.**—The whole pathologic condition of the animal studied by Brooks is that of a widely patent duct of Botal which acted as a short circuit in the aortic circulation, but which was so

well compensated that there resulted no serious impairment of the general health or comfort of the animal. This agrees with the findings of others on man that the prognosis in persistent patency of the duct of Botal is good. Therefore, an effort should always be made to differentiate between aneurysm and patent duct of Botal on account of the difference in prognosis. From Brooks' experience with this animal it would seem that when necessary to administer an anesthetic to a patient with compensated patent duct, there need be no extraordinary precautions, for this dog showed even more than usual resistance to the effects of ether.

113. **Concentration of Blood Affecting Opsonic Index.**—The facts brought out by Jackson and Hawn in their experiments bring into prominence certain factors which bear on the accuracy and variability of the opsonic index. As a result of experimentally altering the concentration of the blood, great variations in the opsonic index made their appearance.

Variations in the physical factors of the blood were produced by the ingestion of water (dilution) or of magnesium sulphate (concentration). Decreased concentration of the blood showed itself by a lowering of the values for specific gravity and viscosity, and an increase in the electrical conductivity. Increased concentration brought about a reversal of these changes. The authors conclude, therefore, that a large portion of the so-called normal variations in the opsonic index are due to changes in the physical characteristics of the blood, and other variations in disease may be explained in part, in a similar manner. These results should also lead us to inquire whether the variations in opsonic index brought about by the injection of vaccines, with the assumed increase in the amount of opsonins in the blood, have not as their basis alterations in the physical factors of the blood; and whether the preparation of the bacteria, so that they may be more readily engulfed by the white cell, may not consist in a large part in changing the surface tension of the system consisting of white cells, substrate and suspension. The authors believe that much experimental work performed along these lines indicates that the latter explanation is probably true.

114. **Blood and Feces After Kidney and Ureter Operations.**—It was found by Jackson and Saiki that when all the various conditions of the experiment (diet, lack of infection, etc.) remained constant, there appeared to be a slight tendency on the part of the animals with both kidneys removed to survive the operation for a longer period than was the case in double ureteral ligation. The analysis of the blood following both operative procedures showed no differences which could account for this. The molecular concentration of the blood increased after both operations until death. The electrical conductivity and chlorid content of the blood, after a temporary rise on the day following the operation, progressively decreased. Hence, the rise in concentration was brought about by an increase in organic substances mainly nitrogenous and noncoagulable in character, as was shown by the blood analysis. Following both operations, the blood becomes more venous, with a resulting increased viscosity due to carbon dioxid and the time of coagulation is increased. No vicarious elimination of water, uric acid or purin bases occurs into the intestine. The urine secreted after the reimplantation into the bladder of the ligated ureters was of a character which did not indicate great renal changes. The variations might be explained by the altered condition of the blood and tissues. The secretion was somewhat low in chlorids on account of low content of chlorids in the blood at that time, high in total nitrogen but low in ammonia nitrogen. The sulphates showed an irregularity which might be construed as pointing to cellular dyspnea. Hydremia does not occur as the result of either operative procedure, and no evidence of edema was ever present. In fact, the tissues at autopsy appeared drier than the normal.

115. **Levulosuria.**—The case of levulosuria cited by Strouse and Friedman belongs to the rare class of spontaneous alimentary levulosurias in which the levulose is derived only from ingested levulose or higher carbohydrates splitting off levulose. The disturbances in the nervous system and in the secondary sexual characteristics of this patient point to a disturbance of function of one or more of the ductless glands. There was no glycosuria present at any time. The authors hold that glucose has no effect on the excretion of levulose, nor is there any diminished tolerance for glucose. The appearance of levulose in the urine is probably due to a partial inability to convert levulose into glycogen, which, according to present conceptions, is a hepatic function. Consequently a constant proportion of levulose in the diet is excreted as such.

117. **Individual Dosage in Tuberculin Therapy.**—The method outlined by White and Van Norman in a former paper was first to determine the sensitiveness of the individual to tuberculin by using on the skin a definite quantity of varying dilutions of tuberculin; then, having arrived at the dilution which, with a given technic, would give a minimal cutaneous reaction around the point of scarification, to determine on this basis the quantity of tuberculin which could be given subcutaneously to produce a reaction of required degree. They call a minimal cutaneous reaction one which gives redness, with some induration, measuring exactly 4 mm. in diameter within seventy-two hours. They have found very few cases in which it is necessary to give only one test to determine the minimal cutaneous reaction, and during the past year all cases of tuberculosis which came under their observation have given minimal cutaneous reaction to 5 per cent. or less.

The past year's work has increased their conviction that it is possible to determine the quantity of tuberculin on the basis of the minimal cutaneous reaction which will give the same result in any group of patients requiring tuberculin treatment, even though these patients differ in their sensitiveness in wide degree. The reaction response having been determined to an individual dose of tuberculin in any given patient, this patient continues to react in the same way to the same dose given every fourteen days for periods as high as twenty-one months, which is the longest time any individual has had tuberculin under this method, and the vast majority of patients continue to react in the same way to the same dose given every fourteen days, without change in the character of the reaction. In a few cases which have been under observation during active disease and arrested disease (National Association Classification) they have found that these cases lose their sensitiveness to tuberculin after becoming arrested, and that increasing doses may be given every fortnight with the same or diminishing local reaction as obtained formerly by the therapeutic dose determined on the minimal cutaneous reaction basis. The variation in the quantify of tuberculin necessary to produce the same grade of reaction in all cases is 100 times. It is not possible to determine by the extent of disease, age or condition of the patient the principle underlying this variation. The administration of tuberculin in doses which produce these mild (local) reactions has given the best results of any method of tuberculin therapy used by the authors.

Delaware State Medical Journal, Wilmington

January, III, No. 2, pp. 1-34

118 Cholecystitis. L. S. Conwell, Camden, Del.

Boston Medical and Surgical Journal

January 18, CLXVI, No. 3, pp. 75-114

119 *Gas Bacillus as Agent of Intestinal Fermentation and Diarrhea. H. F. Hewes and A. I. Kendal, Boston.

120 *Treatment of Tuberculous Adenitis. J. B. Hawes, Boston.

121 Nitrous Oxid-Oxygen Anesthesia, with Description of New Apparatus. W. M. Boothby, Boston.

122 *Relation of Thigh and Leg Muscles to Malpostures of Feet. C. L. Lowman, Los Angeles.

123 Hemorrhage from Throat. A. C. Getchell, Worcester, Mass.

119. **Gas Bacillus in Intestinal Fermentation and Diarrhea.**—That the association of the gas bacillus in excessive numbers with acute infectious diarrhea of the clinical type of dysentery occurs in adults as well as children is shown by a number of cases reported by Hewes and Kendal. The importance of determining the presence of such an association is emphasized by the fact that the treatment is governed thereby.

In the study of cases of bacillary dysentery due to the Shiga or Flexner bacillus it has been determined that these cases do better clinically, run a less toxic course, and tend to improve more rapidly, if the patient is given a diet containing considerable quantities of carbohydrate in a form which is

easily utilized by these special intestinal bacteria, lactose, for example, lactose being broken down in the lumen of the intestinal membrane where these invading bacteria have their principal field of activity.

Results obtained in the treatment of the cases of dysentery in which the gas bacillus was found in large numbers have, on the other hand, indicated not only that these cases do not improve on a diet containing much sugar, as in the Shiga and Flexner cases, but that the diarrhea is apparently much augmented by such a diet, the most efficacious treatment for these cases being a proteid diet, or at least a diet containing little carbohydrate, or, in the cases of infants who cannot take a pure proteid diet well, a special diet of buttermilk. Whatever action the administration of buttermilk has on the course of these cases of gas bacillus diarrhea is explained hypothetically on the theory that the buttermilk provides preformed lactic acid in the intestine in considerable amounts, at one time, more than occurs there as the result of ordinary bacterial action in the intestine, or that the acid-forming bacteria of the milk increase lactic acid formation to an extent sufficient to lessen the action of the gas bacillus. There is in the study of the records of cases of acute infectious diarrhea, (1) a certain amount of evidence that the gas bacillus is an etiologic factor in the causation of certain cases of acute infectious diarrhea having the clinical character of acute dysentery, and (2) very definite evidence that this organism, whether or not a first cause in the production of this pathologic condition, is capable, if the proper food materials are present in the intestine in these cases, of acting as an agent in the production of fermentation in the intestine and in the production of diarrhea.

120. **Treatment of Tuberculous Adenitis.**—This paper is based on a study of fifty-six patients with various forms of tuberculous adenitis who have been under Hawes' supervision during the past five years at the Out-Patient Department of the Massachusetts General Hospital and in private practice. Tuberculin is given according to the rules laid down by Trudeau. Hawes uses a bouillon filtrate kindly supplied from the Saranac Laboratory; its administration has been carried on under Dr. Trudeau's directions and supervision. The initial dose is very small, 1-10,000 to 5-10,000 mgm.; this is gradually increased up to 5 to 10 mgm. In rare instances Hawes continues injections up to 15 to 20 mgm. Reactions are avoided whenever possible. In the majority of instances, whenever the intelligence of the patient admits of it, careful record is kept of the temperature and pulse taken at 8 a. m., 12 m., 4 p. m. and 8 p. m. When the patient cannot do this, Hawes depends on the clinical signs and symptoms as guides for dosage. Surgery is made a consideration secondary to the general treatment of the patient. Patients with broken-down glands, discharging sinuses, etc., are sent to the surgical department for proper dressings; glands which break down and become fluctuant are sent to the surgeon to be incised and evacuated. In a few instances when, after a prolonged and thorough treatment with hygiene and tuberculin, enlarged glands still remain, while the general condition of the patient has been raised to the highest possible point, excision is advised.

A summary of these cases shows that of the total number —fifty-six—there were: twenty-one apparently cured; six arrested; ten much improved; six improved; thirteen not improved or not considered. Of the twenty-one children, 15 years or under, ten were apparently cured, four arrested, two much improved and two improved. The great number of failures to improve were among the adults, and of these there were only two or three in which there was failure to improve after systematic and prolonged treatment with cooperation on the part of the patient. Hawes claims that most of the failures were due to the fact that the patients moved away or did not think it worth while to continue.

122. **Relation of Thigh and Leg Muscles to Malpostures of Feet.**—The author concludes that positions of the knee and thigh in relation to the weight line and as affected by the action of the external rotators of the thigh have a marked effect on that malposture of the foot known as "pronation" or valgus.

Colorado Medicine, Denver

January, IX, No. 1, pp. 1-34

124 Infantile Paralysis; Etiology and Pathology. P. Hillkowitz, Denver.
125 Infantile Paralysis; Prophylaxis and Treatment. J. W. Amesse, Denver.
126 Locomotor Ataxia, with Special Reference to Visceral Crises. J. N. Hall, Denver.
127 Brain Decompression. E. F. Rott, Salt Lake City, Utah.

Journal of Biological Chemistry, Baltimore

January, X, No. 6, pp. 533-551

128 Utilization of Proteins of Legumes. L. B. Mendel and M. S. Fine, New Haven, Conn.
129 How Do Isotonic Sodium Chlorid Solution and Other Parthenogenic Agents Increase Oxidation in Sea Urchin's Egg? J. F. McClendon and P. H. Mitchell, Woods Hole, Mass.
130 *Creatin and Creatinin Metabolism. C. G. L. Wolf, Heidelberg, Germany.
131 *Creatin and Creatinin Metabolism in Dogs During Feeding and Inanition, with Special Reference to Function of Liver. C. Towles and C. Voegtlin, Baltimore.
132 Catabolism of Histidin. H. D. Dakin and A. J. Wakeman, New York.

130. **Creatin and Creatinin Metabolism.**—Wolf believes that the explanation for the excretion of creatin in the urine will not be found to reside alone in a disturbance of the carbohydrate metabolism, nor in a disturbance of the liver, but that other processes are contributing to this end.

131. **Id.**—According to Towles and Voegtlin the more or less constant excretion of creatinin in an animal on a fixed diet is explained by the constancy of the three factors which determine it, viz., production in the course of catabolism, destruction through the action of enzymes and kidney secretion. In the dog creatinin and creatin are not true end-products of metabolism. That portion of these substances which appears in the urine is due to the fact that it is excreted by the kidney before destruction occurs. It is shown that the liver does not play the important rôle in reference to the creatin metabolism that has been ascribed to this organ. The occasional appearance of creatin in the urine after creatin administration as well as the occasional increase of urinary creatinin after creatin administration, suggests the possibility of creatinin hydrolysis being a reversible reaction in the animal organism.

Medical Fortnightly, St. Louis

December 11, XXXX, No. 11, pp. 497-518

133 Principles Underlying Treatment of Visceroptosis. W. M. Thompson, Chicago.
134 Cholecystitis. J. M. Bell, St. Joseph, Mo.
135 Neuralgia of Fifth Nerve. T. G. Stephens, Sidney, Iowa.
136 Therapeutics of Tuberculosis. W. Porter, St. Louis.

January 10, XLI, No. 1, pp. 1-20

137 Rheumatism. E. D. Holland, Hot Springs, Ark.
138 Pathology that Remains After Non-Surgical Treatment of Inflammation in Abdominal Cavity. J. W. Cokenower, Des Moines, Iowa.
139 Typhoid Vaccination. J. S. Gaumer, Fairfield, U. S. A.

Interstate Medical Journal, St. Louis

January, XIX, No. 1, pp. 1-92

140 Anatomy and Physiology of Heart and Their Bearing on Diagnosis and Treatment of Cardiac Arhythmias. T. E. Satterthwaite, New York.
141 Paget's Osteitis Deformans; Report of Case. R. Lyons, New Orleans.
142 Division of Auditory Nerve for Persistent Tinnitus; Operation; Recovery. E. B. Dench, New York.
143 Acute Poliomyelitis in Iowa. W. L. Bierring, Des Moines, Iowa.
144 The Cancer Problem. L. Loeb, St. Louis.
145 Chylothorax; Report of Case. L. Sale, St. Louis.
146 *Uric Acid Excretion in Migraine. A. C. Croftan, Chicago.
147 *Two Cases of Aortic Aneurysm Mistaken for Asthma; Absence of Pulsation, Thrill and Bruit; Diagnosis by Inspection, Confirmed by Roentgenogram. S. Solis-Cohen, Philadelphia.

146. **Uric Acid Excretion in Migraine.**—This contribution concerns itself with a study of the uric acid (plus the purin-xanthin bases, forming about 10/12 per cent. of the total purins) metabolism in three cases of typical migraine performed in patients of a high degree of intelligence, whose cooperation was willingly secured to carry out tedious dietary restrictions and to collect a series of twenty-four hours' urines for a considerable period of time. Croftan submits the results simply as a chronicle of fact without comment; as an observation and not as an argument. The perversion of the uric acid secretion observed in all these cases is presumably a

symptom rather than a cause. It demonstrates merely a deep-seated metabolic perversion partaking of the character of a "nucleolytic intoxication" and closely resembling similar conditions observed in gout and in other masked manifestations of atypical gout, and to indicate an appropriate prophylaxis and therapy accordingly. Croftan says that prophylactically and therapeutically, the use of a purin-free diet (with quantitative regulation, according to the tolerance for uric acid developed in each individual) together with an energetic alkaline-salicylate treatment, is thoroughly indicated in migraine of this type. He says the impression is gained that in cases so treated the frequency and the severity of the attacks have been reduced.

147. **Aortic Aneurysm Mistaken for Asthma.**—Both of Cohen's patients were syphilitic male laborers in middle life. Both were suddenly attacked with dyspnea, at first, apparently, paroxysmal. There was absence of pulsation, thrill and bruit. Both were sent to the hospital with the diagnosis of asthma. In both, the diagnosis of obstructive dyspnea, possibly aneurysmal, was made on sight. What makes the cases worthy of record in Cohen's opinion is that sudden dyspnea was the sole symptom; that the ordinary physical signs of aneurysm are wanting; that incidentally to the constant dyspnea, paroxysms of increased distress with wheezing and sonorous and sibilant râles misled practicing physicians, outside the hospital, to a diagnosis of asthma; and that the significant features of the case to the eye and ear of the reporter were the supraternal recession and stridor, incompatible with asthma and indicative of obstruction in or around the larynx or trachea.

Medical Record, New York

January 13, LXXXI, No. 2, pp. 51-100

148 *Musical Memory and Its Derangements (Amusia). J. L. Corning, New York.
149 Surgical Treatment of Goiter. W. D. Hamilton, Columbus, Ohio.
150 Toxemias of Pregnancy. S. H. Blodgett, Boston.
151 *Omphalorrhagia Neonatorum. J. H. Richards, New York.
152 Unusual Case of Fibroid Sclerosis of Corpora Cavernosa. M. Ziegler, New York.

January 20, LXXXI, No. 3, pp. 101-150

153 *Some Extrapulmonary Sounds Which Simulate Râles. G. E. Bushnell, U. S. Army.
154 Treatment of Acute Lobar Pneumonia. C. E. Nammack, New York.
155 Multiple Hereditary Telangiectasis of Tongue, Turbinates and Septum with Recurring Hemorrhages. C. D. Van Wagenen, New York.
156 Management of Inguinal Hernia in Childhood. W. F. Campbell, Brooklyn.
157 Importance of Roentgen-Ray in Diagnosis of Bone Disease. S. B. Childs, Denver.
158 Physical Therapeutics in Medical Press. M. L. H. A. Snow, New York.
159 Radioactive Waters in Treatment of Gout. A. C. Burnham, New York.
160 *Fatal Case of Bismuth Paste Poisoning. L. W. Ely, Denver.

148. **Musical Memory and Its Derangements.**—Corning presents a résumé of the psychology of the musical memory, describes the localization of this faculty in the vicinity of the speech centers, and reports illustrative cases showing how lesions of the cerebral tracts causing aphasia, alexia, and agraphia may be accompanied by a loss of musical memory in its various aspects. The musical faculty is developed very early, tone images being formed before word images. Memory is not a simple faculty, but there are many different kinds of memory, such as sound and other sense memories, word memories, motor memories, sensory memories, etc. The musical memory includes auditory, visual and motor memories. The sense of time, rhythm, melody and harmony are equally important. Musical memory, then, is not a simple matter. The player of instrumental music has much more to learn than the vocalist, since the process of memory is here much more complex. Memory varies very greatly in different individuals as to its constituents and action. With some the auditory memory is much better than the motor memory. Some remember the printed notes, others the sounds and harmony. Any pathologic condition lessening or disturbing the cerebral, and especially the cortical, nutrition may cause derangement of memory and attention. Such is the case with the effects of alcohol, tobacco and other narcotics. Attention is of the greatest importance to the musician. In committing anything to memory excessive fatigue should be avoided, periods of twenty minutes of effort being interspersed with periods of rest. The phenomenon of automatism after practice is of the first importance to the musical memory, the playing of pieces becoming automatic after a time. With the singer an auditory-motor bond need not be established. In the faculty of memory auditory association is the principal factor. There may be a congenital absence of the musical faculty, and states in which apoplexy or paralysis play a part are frequently accompanied by loss of musical memory.

151. **Omphalorrhagia Neonatorum.**—Richards presents the history of a case of umbilical hemorrhage in which the blood began to clot only when serum from the father was introduced into the veins of the baby.

153. **Extrapulmonary Sounds Which Simulate Râles.**—Sounds caused by the slipping of muscular fibers are, in Bushnell's experience, most marked over the pectoralis major in the anterior axillary fold. They may be reproduced by movements of the stethoscope as Sahli says, but by gentle lateral movements, not by repeated intermittent pressure as in the phenomenon now under discussion. These latter sounds are evidently not due to active muscular contraction, first, because they are quite different from the well recognized muscular sounds especially common over the trapezius; secondly, because they are heard best when the underlying muscle is passive; thirdly, because they are not heard at all over spare, well-muscled chests in which purely muscular sounds should be heard most readily. They are finer sounds than those produced by pressure of the stethoscope on lobulated fat. They are distinctly a phenomenon of juicy tissue, whether subcutaneous or muscular is uncertain. The question suggests itself to Bushnell whether they may not be a sign of retention of water. They do not occur in clinical edema in which the tissues are filled with fluid. But if the state of the nutrition be such that there is a tendency to an accumulation of fluid above the normal, but short of true edema, the fluid might conceivably be displaced by pressure with the production of sound. If this be the explanation no reason is apparent why the phenomenon should be confined to the thorax.

160. **Bismuth Paste Poisoning.**—Ely's case was a typical spinal Pott's, with a well-marked kyphosis and a freely discharging sinus in the right lumbar region, which ensued on an abscess. July 7, 1911, an injection was made into the sinus, consisting of the regular bismuth paste mixture, 1 part bismuth subnitrate to 2 parts vaseline. A sharp rise in temperature, to 103 F., followed the injection. August 24, an injection of about 2 ounces of the paste was made. A sharp febrile reaction again followed the injection, reaching 103 F. September 15, about 2 ounces of the paste were injected. The injection was followed by the usual rise in temperature. September 30, the abscess was almost healed. A drop or two of pus occasionally exuded. The patient had a blackish discoloration on one side of her tongue, but seemed in fairly good condition. October 5, the child had been vomiting constantly, lost weight steadily, kept nothing on her stomach and was very restless. October 8, 8 c.c. of olive oil were injected into the sinuses. The patient grew steadily worse. Ulcers developed on both sides of the mouth, between the cheek and alveolar process, spreading rapidly. Some little discharge of bismuth followed the injection, October 13, of 8 c.c. of olive oil. Temperature practically normal; pulse, 120 to 130. Mouth dry and brown. October 17, two bloody stools. Death.

Laryngoscope, St. Louis

December, XXI, No. 12, pp. 1131-1210

161 Observations on Cribriform Plate and Olfactory Nerve in Man and Certain Animals. J. J. Kyle, Indianapolis.
162 Inferior Turbinate; Its Longitudinal Resection for Chronic Intumescence. O. T. Freer, Chicago.
163 Cyst at Base of Tongue. E. A. Forsyth, Buffalo.
164 Laryngo-Esophageal Fistula; Laryngostomy; Cure. J. A. White, Richmond, Va.
165 Esophagoscopy. R. H. Johnston, Baltimore.
166 Method of Filling Excavated Mastoid with Flap from Back of Auricle. H. P. Mosher, Boston.
167 Some Anomalies of Mastoid from Surgical Aspect. H. B. Hitz, Milwaukee.
168 Symptom of Mastoiditis. H. A. Alderton, Brooklyn.
169 Sigmoid Sinus and Jugular Bulb in Infancy. W. C. Braislin, Brooklyn.

FOREIGN

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

British Medical Journal, London

January 6, 1, No. 2862, pp. 1-56

1 *Jejunal and Gastrojejunal Ulcers. A. W. Mayo-Robson.
2 Urethral Calculi. K. W. Monsarrat.
3 Case of Calculi of Prostatic Urethra. R. L. Spittel.
4 *New Cell Proliferant; Its Clinical Application in Treatment of Ulcers. C. J. Macalister.
5 *New Cell Proliferant: Symphytum Officinale or Common Comfrey. W. Bramwell.
6 Treatment of Puerperial Septicemia by Vaccines. A. Hawkyard.
7 Salvarsan in Yaws. H. Alston.
8 Examination of Abor Arrow Poison. F. M. Windsor.
9 *Unusual Urinary Deposit of Calcium Carbonate. W. H. Brown.

1. **Jejunal and Gastro-Jejunal Ulcers.**—The operation Mayo-Robson has performed consists in taking a loop of the jejunum well beyond its origin, just sufficiently long to reach the surface without tension. A small incision is then made into the top of the loop just large enough to admit a No. 12 Jacques catheter, which is inserted and passed for fully three inches down the distal arm of the loop. This is fixed to the margin of the incision in the gut by a silk or thread suture and the entrance of the tube into the bowel is further secured by two purse-string sutures one over the other. The top of the loop is fixed to the parietal peritoneum and posterior aponeurosis by two stitches and the wound closed around the tube. The patient can then be fed at once with egg, milk and a little brandy. The whole operation is done in from ten to fifteen minutes and with no shock and very little visceral exposure. As a further precaution, the loop may be short-circuited, but this is not absolutely necessary, and, should the patient be seriously ill, the short circuiting is undesirable. For the operation to be a success the bowel must be placed so that it will serve two purposes: (1) To permit the passage onwards of the bile and pancreatic fluid poured into the intestine above the artificial fistula; and (2) to allow of food being introduced into the fistula without fear of regurgitation either of the food or of the intestinal contents. The feeding is done by means of a funnel and tube that will slip over the catheter and it can be repeated every four hours, or more or less frequently, according to the requirements of the case. The operation has been found useful in the following conditions: 1. Widespread cancer of the stomach too advanced for gastrostomy. By securing complete rest to the stomach, it stops hemorrhage, relieves pain, diminishes the size of the tumor and prolongs life very considerably. 2. In general cicatricial contraction of the stomach, due to the swallowing of caustic fluids, in which the stomach has been so far damaged that it no longer performs its functions or even allows of the passage onwards of food. 3. In chronic ulcer of the stomach giving rise to hemorrhage, pain or vomiting and to malnutrition; and where the patient is too ill to bear partial gastrectomy, which can, however, be subsequently done if thought needful after the patient's condition has been restored by adequate feeding. 4. In some cases of chronic duodenal ulcer, associated with hyperchlorhydria, in which there may be a fear of jejunal ulcer subsequently developing if gastro-enterostomy be performed. 5. In certain cases of duodenal ulcer in very stout subjects where it is extremely difficult to perform a posterior gastro-enterostomy and in which violent hemorrhage has only recently occurred and may be again excited by dragging on the stomach. 6. In jejunal or gastro-jejunal ulcer where the patient is thought to be too ill to bear one of the extensive operations previously mentioned; or where, the disease being slight, it is thought that the complete rest of the stomach and upper jejunum that can be given by a jejunostomy will at the same time relieve the hyperchlorhydria and cure the ulcer. Neumann has, in fact, suggested the operation for hyperchlorhydria alone. 7. In recurring hematemesis failing to yield to ordinary treatment and where on exploration no ulcer or other removable cause can be discovered. 8. In persistent vomiting threatening life, as in the severe and sometimes fatal vomiting of pregnancy, where no food whatever can be retained in the stomach.

4. **New Cell Proliferant in Ulcers.**—Macalister's experiences with allantoin, a crystalline solid, very rich in nitrogen and melting at 226 C., extracted from the root of the common comfrey, have led him to believe that it may prove to be of considerable practical utility in the treatment of ulcers of all kinds, even gastric and other internal ulcers. It is easy of application and non-irritating. Although allantoin itself is somewhat expensive, the solutions for application only require to contain from 0.3 to 0.4 per cent. of the crystals.

5. **New Cell Proliferant.**—Bramwell says he has on more than one occasion cured old ulcers which have resisted other treatment, by the simple extract from the comfrey, *Symphytum officinale*, applied on lint to saturation. After a few hours this dressing, in favorable cases, sets quite hard, and can only be removed by the lengthy application of water, which is often more tedious and painful than the average patient, who has been in the habit of applying some simple dressing, cares to endure. This hard setting acts, in some measure, like strapping, drawing the edges of the ulcer towards one another, but probably much more evenly and accurately than the most skilful strapping could effect. This looks as though the cure is wrought similarly to healing under a scab. He, too, has frequently used it internally as a last resource where more elegant preparations have failed, for example, in gastralgia, when he has believed this to be due to an irritated gastric mucosa, and to ease the pain of and to cure gastric ulcer.

9. **Urinary Deposit of Calcium Carbonate.**—Brown's patient, a man aged 65, was presumably suffering from granular kidney. He had been feeling in excellent health till this, the first and terminal illness since boyhood. The symptoms began with headache, followed later by sickness and vomiting; he got progressively worse, gradually passed into a comatose state and died three weeks after the onset of symptoms. The arterial tension was noted to be high. At no time did the urine contain more than a very small quantity of albumen. The first specimen, examined during the first week of illness, showed an organic deposit containing a number of granular and hyaline casts, but no crystals of any kind. A second sample, examined two days later, showed no deposit and no tube-casts were found in this or any of the samples thereafter. During the second week of illness the urine became more highly colored and muddy and looked simply like a concentrated urine with a deposit of pale urates. Microscopic examination, however, revealed a very large number of crystals of clear and sharply defined appearance, consisting of a double contoured envelope and a finely striated structure centrally. For some days this sediment continued to be present, and then was gradually replaced by one of the same chemical composition, but different form, possibly in a different phase of formation. Of this interesting and unusual deposit Brown offers no explanation. The patient's diet latterly consisted of nothing but milk and the only drugs he had during his illness were the alkalies, a few doses of erythrol-tetranitrite and hypodermic injections of pilocarpin.

Lancet, London

January 6, 1, No. 1, pp. 1-74

10 *Sensory Disturbances from Cerebral Lesions. H. Head and G. Holmes.
11 *Indications for Surgical Interference in Treatment of Tuberculous Joint Disease in Children. A. H. Tubby.
12 Three Cases of Erythremia (Polycythemia). W. H. White.
13 Some Points in Diagnosis and Treatment of Chronic Duodenal Ulcer. R. G. A. Moynihan.
14 Twelve Foreign Bodies Requiring Surgical Interference. R. Parker.
15 *Observations on Fungi Found in Tropical Bronchomycosis. A. Castellani.
16 Theory and Practice in Treatment of Glaucoma. J. H. Parsons.
17 Lymphatic Varicocele. F. C. Madden.
18 Prevention of Tuberculosis. J. S. Wallace.
19 *New Method of Counting Leukocytes. R. A. P. Hill.
20 Case of Cerebral Malaria; Recovery After Forty-Eight Hours' Unconsciousness. W. T. Quaife.

10. **Sensory Disturbances from Cerebral Lesions.**—This paper is a preliminary communication in which the authors put forward a general conception of the mechanism underlying sensation based on a study of human beings in whom disease, accident, or surgical interference has produced some stationary lesion. It appears from their investigations that the brain-stem between the nuclei of the posterior columns and the

final termination of all sensory paths in the optic thalamus is the seat of the following changes: 1. The impulses for pain, heat and cold continue to run up in separate secondary paths on the opposite side of the nervous system to that by which they entered. They receive accessions from the regrouped afferent nerves of the head and upper part of the neck. Although these paths are frequently affected together they are independent of one another, and any one of the three qualities of sensation may be dissociated by disease. 2. Lesions of the spinal cord tend to diminish simultaneously all forms of painful sensibility, but with disease of the brain-stem the gross forms of pain and discomfort may pass to consciousness, although the skin is analgesic. This applies not only to painful pressure but to the discomfort produced by excessive heat. 3. The impulses concerned with postural recognition part company with those for special discrimination at the posterior column nuclei. Up to this point they have traveled together in the same column of the spinal cord, but as soon as they reach their first synaptic junction they separate. Above the point where they enter secondary paths the power of recognizing position and passive movement can be affected independently of the discrimination of two points and the appreciation of size, shape and form. 4. It would seem as if those elements which underlie the power of localizing the spot touched or pricked become separated off from their associated tactile impulses before they have actually come to an end in the optic thalamus. The long connection of localization with the integrity of tactile sensibility is here broken for the first time. All these changes are preparatory to the great regrouping which takes place in the optic thalamus and will form the subject of a second paper.

11. **Treatment of Tuberculous Joint Disease in Children.**—The objects of every form of treatment of tuberculous arthritis must be: (1) To eradicate the disease; (2) to preserve the functions of the part. It appears to Tubby that the balance of experience gained in treatment during the last decade shows that unquestionably conservative treatment is the better in childhood. Time is saved, the resultant deformity is diminished and there is less risk of generalized tuberculosis when the treatment is nonoperative.

15. **Fungi Found in Tropical Bronchomycosis.**—The fungi which Castellani has so far found in cases of tropical bronchomycosis may be classified as follows: 1. Those belonging to the genus Endomyces. 2. Those belonging to the genus Saccharomyces. 3. Those belonging to the genera Streptothrix and Actinomyces. 5. Nondetermined fungi.

19. **New Method of Counting Leukocytes.**—The advantage of the method described by Hill is said to be that a total and differential count may be done simultaneously, the whole process taking about ten minutes or less. The only apparatus needed besides the usual Thoma pipette and slide is a small cylindrical tube graduated and corked. The tube of a Haldane's hemoglobinometer cut down to the level of the 120 mark is very convenient. Liquor potassæ will clean it after use. The diluent must be made up at the time. Its composition is: Distilled water, 12 parts; acetone, 3 parts; methyl alcohol, 1 part; and Wright's modification of Leishman's stain, 4 parts. This reagent is used as the diluent for the blood in any dilutions from 1 in 200 to 1 in 10. The red cells become almost invisible, the leukocytes stain just as they do in a film and can be distinguished without the least difficulty. A dilution of 1 in 100 will give some eighty cells on the big square of a Thoma-Zappert slide. In marked leucopenia a 1 in 10 dilution enables one to find as many cells as are needed in a few minutes. There is no overstaining or precipitation in the course of two hours; there is no difficulty arising from unequal distribution or distortion or bad staining, such as one meets with in film preparations, especially if made on a slide and in many cases one glance is enough to reveal the condition as, for instance, a marked eosinophilia, or excess of lymphocytes, large mononuclears or polymorphic cells. The stain will keep for several hours if corked, but it is best to prepare just enough for use each time; that is the purpose of the small cylinder. With a hemoglobinometer tube 24 divisions of water and the rest in proportion is enough for a 1 in 100 pipette if it can reach to the bottom. Besides the absolute cleanliness and the purity of reagents necessary for all blood work, three precautions must be observed: (1) The Wright's stain must be filtered. It is best to do this at the time of making it up. (2) The mixture must be very well shaken. (3) The various operations of mixing and putting the drop on the slide must be done with promptness; especially must the drop be covered as soon as possible, as the cells settle quickly and the acetone evaporates readily.

Australasian Medical Gazette, Sydney

November 20, XXX, No. 11, pp. 633-710

21 State and Venereal Diseases. A. J. Turner.
22 Phthisis in Married Couples. J. C. Verco.
23 Open Ethyl Chlorid Anesthesia for Minor Operations and as Preliminary to Open Anesthesia. R. W. Hornabrook.
24 Hints on Administration of Anesthetics. J. W. Bean.
25 Fatal Postoperative Thrombosis. F. J. E. Juttner.

Glasgow Medical Journal

January, LXXVII, No. 1, pp. 1-79

26 Cancer of Uterus; Some Practical Aspects of Its Diagnosis and Treatment. A. W. Russell.
27 History of Pathology in Glasgow Royal Infirmary and Functions of Pathologic Department. J. H. Teacher.
28 *Treatment of Pneumonia by Polyvalent Stock Pneumococcic Vaccine. F. Charteris.
29 *Enlargement of Thymus: Remarkable Case. A. M. Kennedy.

28. **Treatment of Pneumonia.**—Charteris used the vaccine in a series of nineteen cases of acute pneumonia. The cases were not specially selected, and were, as far as possible, treated with vaccine alone, though in all serious cases the usual remedies were used, such as the administration of strophanthus and stimulants. The only selection made in regard to the cases was to exclude from the vaccine series those cases which, on admission, seemed to be on the point of having the crisis. In this way an additional series of ten cases was observed during the same period in which the vaccine treatment was being used. These ten cases have, therefore, the value of control experiments. The vaccine used in this series of cases was prepared from organisms isolated from the sputum of five typical cases of pneumonia. The vaccine was tried at all stages of the disease and in varying doses. The effect of the vaccine treatment was certainly not miraculous. Four patients died of the disease, while a fifth after coming through the acute stage, succumbed to exhaustion on the sixth day after the crisis. This mortality is not very satisfactory, but it compares not unfavorably with that of the series of ten cases, with two deaths, which was treated in the same wards without vaccine during the same period. Of the fatal cases in the vaccine series, the only instance in which the vaccine seemed to do harm was in a case in which death from hyperpyrexia occurred within eighteen hours of the administration of the vaccine. In another case the first two injections of the stock vaccine had no apparent effect, but the third and fourth injections, which contained an autogenous strain, were followed by such marked improvement that the patient seemed to be on the high road to recovery. A fifth injection was followed by an alarming increase in the severity of the symptoms; first empyema and, later, meningitis developed. The early administration of vaccine did not abort the disease, nor prevent complications. Complications were relatively frequent in the vaccine series, viz., one instance of meningitis, two of empyema and one of hyperpyrexia.

29. **Enlargement of Thymus.**—Kennedy's case is one in which the enlarged thymus was the cause of death, undoubtedly by its mechanical effects; but the death, although somewhat sudden in the end, only occurred after symptoms of cardiac failure had been present for some months. Death in this case was clearly due to cardiac failure; the two outstanding features found post mortem were enlargement of the thymus and hypertrophy of the right side of the heart.

Journal of Tropical Medicine and Hygiene, London

January 1, XV, No. 1, pp. 1-16

30 Effect of Various Drugs in Expelling Hookworms. B. Nicol.
31 Prevalence of Filarial Embryos in Blood of Lagos Natives A. Connal.
32 Imported Indian Case of Oriental Sore in West Africa. A. Hutton.
33 Superficial Lymph-Nodes as Source of Leishmania for Diagnosis in Cases of Kala-Azar. S. Cochran.

V. 58
1912

Indian Medical Gazette, Calcutta

December, XLVI, No. 12, pp. 449-488

34 Quinin Without Tetanus and Some Remarks on Tetanus and Quinin. Sir D. Semple.
35 Radio-Activity of Some Thermal Springs in Bombay Presidency. A. Steichen and H. Sierp.
36 Blood-Pressure. J. G. P. Murray.
37 Case of Acute Hepatitis with Indications of Pus Formation, Subsiding Under Ipecacuanha Treatment. F. F. Elwes.
38 Cases of Leech in Air Passages. W. E. Scott-Moncrieff.
39 *Treatment of Oriental Sore. G. G. Jolly.
40 *Uncommon Fracture of Skull. T. H. Keates.
41 Unusual Case of Worms in Peritoneal Cavity Simulating Appendicitis. R. G. Pickle.

39. **Treatment of Oriental Sore.**—Scraping in Jolly's opinion is the method of most general application. It is indicated when the sores are not situated on the face and when ulceration is not very extensive. The scraping should be done thoroughly, special attention be paid to the edges, which should be rendered flush with the surrounding skin. The sores may then be swabbed with pure phenol and dressed with any moist antiseptic dressing. In the after-treatment, mercury ointments, especially unguentum hydrargyri, ammoniati, appear to hasten healing and prevent relapse.

40. **Fracture of Skull.**—In Keate's case a contused three-cornered wound ¾ inch in diameter was found over the internal angular process of the frontal bone on the right side, just above the root of the nose. The wound went down to the bone. There was great ecchymosis of the right upper eyelid and subconjunctival hemorrhage of the right eye. The right pupil was dilated and the left somewhat contracted. There was some blood issuing from the left ear. On reflecting the scalp, the outer surface of the skull was seen to be intact, there was no fracture at the site of the injury and the right orbital crest was intact. When the brain was removed, a subdural hemorrhage was seen occupying the right anterior fossa. About 2½ ounces of blood-clot were present; this had somewhat hollowed out the under surface of the right frontal lobe and had extended from there into the right sylvian fissure, which was entirely filled up with blood-clot, that had completely surrounded and pressed on the Island of Reil. The bleeding was seen to have come from a fracture in the center of the orbital plate of the frontal bone. This fracture was something like a bullet-hole, oval in form and about 1 inch in its greatest diameter. The bone occupying this area had been split into fragments, which had forced through and torn the dura mater in this position. This was the only fracture present.

Annales des Maladies des Org. Génito-urinaires, Paris

October 15, XXIX, No. 20, pp. 1825-1920

42 *Aberrant Ureter Calculi. (Calculs aberrants de l'uretère.) S. Frenkel.
43 Syphilis of the Urethra. (La syphilis de l'urétre.) C. Baye.

November 1, No. 21, pp. 1921-2016

44 Improved Technic for Electrolytic Treatment of Urethral Stricture. (Nouveaux instruments électrolytiques pour le traitement des rétrécissements de l'urétre.) L. V. Girolano.
45 *Nephrotomy for Acute Medical Nephritis. (Du traitement chirurgical des néphrites médicales aigues.) G. Worms and A. Hamant.

November 15, No. 22, pp. 2017-2112

46 Tuberculous Stricture of the Urethra. (Cas de rétrécissement tuberculeux de l'urétère chez un malade atteint de tuberculose de l'appareil urinaire.) G. Constantinesco.
47 Technic for Transvesical Prostatectomy. (Deux nouveaux instruments pour la prostatectomie transvésicale.) V. Compan.
48 *Diagnosis of Ureter Calculi. (Diagnostic des calculs des uretères.) L. Casper.

42. **Wandering Ureter Calculi.**—Frenkel comments on the fact that a concrement arrested in the ureter may become impacted and finally make its way through the wall of the ureter. This is more likely to occur when the stone is hard and irregular in shape. The ureter wall closes after it, often without leaving a trace of its passage. In twenty-five cases on record the concrement escaped into the pelvis in eight, in the lumbar region in seven; the iliac portion of the ureter was involved in four, and in four cases it was impossible to find the portal through which it emerged. In one case there were two aberrant calculi and in Picqué's more than this number. He discusses the symptoms liable to occur and the measures suitable for different contingencies.

45. **Nephrotomy for Acute Nephritis.**—Worms and Hamant report from Nancy a case of acute nephritis following osteomyelitis and complicated by anuria and uremia, with recovery after nephrotomy. Acute transient nephritis, of course, does not require this, but when it persists and anuria, uremia or miliary abscesses develop, operative intervention is indicated. Nephrotomy with prolonged drainage is the preferable technic. The anuria of subacute nephritis is otherwise almost inevitably fatal. They have found thirteen cases on record of operative treatment of acute nephritis, reported with details, which they summarize in addition to their own case. Five of the fourteen patients recovered.

48. **Diagnosis of Ureter Calculi.**—Casper has sometimes been able to diagnose the concrement, after failure of all other measures, by introducing a catheter with a metal guide under roentgenoscopic control. Once diagnosed, he tries to induce spontaneous expulsion by injecting glycerin into the ureter or distending the part by an inflatable bag fastened to the tip of the catheter. If these fail, an extraperitoneal operation may be necessary, with extreme care to prevent development of a fistula.

Archives de Médecine des Enfants, Paris

December, XIV, No. 12, pp. 881-984

49 *Serodiagnosis of Inherited Syphilis in Children and Familial Syphilis. (Le séro-diagnostic dans l'hérédo-syphilis infantile et la syphilis familiale.) C. Leroux and R. Labbé.
50 Local Tuberculin Reactions. (Etude des réactions locales à la tuberculine.) H. Rozenblat.

49. **Serodiagnosis of Inherited Syphilis.**—Leroux and Labbé found the results concordant in 77 per cent. of the cases in which the test was applied repeatedly to the same individual. A positive reaction may be accepted as an almost certain index of syphilis, but a negative reaction is less conclusive. In testing for inherited syphilis they insist on the importance of applying the test to the parents. Syphilis in the parents is frequently latent and unsuspected by the mother, at least. The serodiagnosis showed that the syphilis on the part of the mothers was most commonly latent and virulent; the fact that its presence was not suspected explained the lack of treatment and the resulting virulence. Over 76 per cent. of the mothers of children with inherited syphilis are infected themselves. Maternal syphilis with a negative seroreaction entails on the children merely parasyphilitic manifestations, or the children may be free from the inherited taint. None of the testimony accumulated in this research indicated that a father with florid syphilis can generate a child with active syphilis (positive reaction), without the mother's being infected. It seems to be the mother who determines the nature of the manifestations of inherited syphilis.

Bulletin de l'Académie de Médecine, Paris

December 19, LXXV, No. 42, pp. 341-380

51 *Vaccination Against Typhoid. (Sur la vaccination antityphoïde.) A. Chantemesse.
52 *Successful Removal of Embolus in Femoral Artery. (Embolie fémorale au cours d'un rétrécissement mitral pur. Artériotomie. Guérison.) Mosny and J. Dumont.
53 *Infant Welfare Stations. (De l'éducation des nourrices et de la surveillance des nourrissons.) E. Vidal.
54 *Training the Respiration to Ward Off Tendency to Pant. (Méthode de respiration rythmée, préventive de l'essoufflement pendant la marche ascendante ou rapide. Son importance éducative.) A. Manquat.

51. Summarized in the Paris Letter in THE JOURNAL, January 20, p. 209.

52. **Removal of Embolus in Femoral Artery.**—Successful operations of this kind are extremely rare, as the vessels are generally diseased and the patients elderly when the embolism develops. This was not the case in the patient of 38 whose operative treatment is here described. The embolism occurred in consequence of pure mitral stenosis and the embolus was not infected, the artery was sound and readily accessible. This is the first permanently successful operation of the kind on record, Mosny and Dumont remark; the obstruction of the artery dated from only a few hours but the leg was already livid and cold. The prompt operation undoubtedly saved the limb from gangrene.

53. **Infant Welfare Stations.**—Vidal makes a practice of having the infants who are wards of the community and boarded out, brought for inspection and consultation, once a month. The women nursing or merely caring for the children

are instructed in the care of the infants and general hygiene, and these conferences are proving of great educational value. The emulation between the nurses is quite a stimulus. Only six have died of the 225 infants thus cared for during the last sixteen years, and the general average of the health of these little orphans or half-orphans is remarkably high. He also has infant consultations twice a week for all the families on the poor list. These infant consultations are only for the healthy. If the children are sick the city physicians are sent for and go to them in their homes. Each infant has its individual record card.

54. **Voluntary Control of the Breathing in Hill-Climbing.**—Manquat says that it is possible to avoid puffing and panting in climbing hills or stairs, by keeping the respiration under control of the will, not increasing the rate over eighteen, twenty or twenty-four to the minute, maintaining the normal proportion of the expiration period as twice the length of the inspiration period. By controlling the respiration in this way, the young are taught to breathe properly and the elderly with weakened hearts can often climb hills or stairs without getting out of breath.

Bulletin de la Société de Pédiatrie, Paris

November, XIII, No. 8, pp. 377-418

55 *Decompressive Trephining for Children. Broca.
56 Acute Articular Rheumatism in Child Causing Acute Mental Confusion. Salicylic Acid Refound in Cerebrospinal Fluid. (Rhumatisme cérébral à forme de confusion mentale aigue.) F. Nobécourt and H. Darre.
57 Technic for Laryngologic Examination. (Une méthode trop peu connue et pourtant indispensable en laryngologie chez l'enfant.) H. Abrand.

55. **Decompressive Trephining.**—In one case related by Broca the decompressive trephining gave such relief that the child apparently succumbing to a brain tumor, recuperated and has developed since practically normally. What the trouble could have been is still a mystery.

Lyon Médical, Lyons

December 10, CXVII, No. 50, pp. 1268-1340

58 *Treatment of Sciatica by Hot Hydrotherapy. (Le traitement de la sciatique par l'hydrothérapie chaude. Résultats immédiats; résultats éloignés.) L. Duverney.

December 17, No. 51, pp. 1341-1412

59 Three Cases of Total Heart-Block. (Trois cas de Stokes-Adams avec block total.) L. Gallavardin.

December 24, No. 52, pp. 1413-1472

60 *Non-Tuberculous Hemoptysis and Pseudohemoptysis. (Les hémoptysies à répétition non tuberculeuses et les fausses hémoptysies.) Garel and Gignoux.

58. **Hydrotherapy for Sciatica.**—Duverney practices at Aix-les-Bains and treats sciatica by the various methods of applying the hot mineral waters, commencing with the simplest and going on to the more powerful hydrotherapeutic measures at need. By this means he has cured or materially relieved 80 per cent. of eighty-one patients, and among thirty-six traced to date only five were found not improved or cured; there had been a relapse in five other cases.

60. **Non-Tuberculous Hemoptysis.**—Garel and Gignoux found varices at the base of the tongue responsible for the supposed hemoptysis in sixty-eight cases on record, and these varices occurred in the pharynx in three similar cases. In other cases the hemorrhage came from the larynx which was merely congested, or the bleeding was of neuropathic origin, a menstrual manifestation of a tendency to hemophilia, or a symptom of chronic nephritis or liver disease. Massei has reported a case of a chronic hemorrhagic catarrhal affection of the trachea. The compilation includes further three cases of hemorrhage from the pharynx, ten with pseudohemoptysis with albuminuria, seven with glycosuria, two with liver disease, twelve with hemoptysis of hysteric or nervous origin, five with "arthritism," three of menstrual origin, and eighteen of unknown cause.

Presse Médicale, Paris

December 23, XIX, No. 102, pp. 1057-1068

61 *Prophylaxis and Treatment of Leprosy. (Prophylaxie et lutte anti-lépreuse.) M. Jeanselme.
62 Dosage and Contra-Indications of Hectine. (Dosages et contre-indications de l'hectine.) F. Balzer.
63 Acute Tuberculous Infection with Tardy Manifestations. (La typhobacillose de Landouzy. Son diagnostic par les inoculations massives de sang avec exclusion préalable du sérum.) Lafforgue.

December 27, No. 103, pp. 1069-1076

64 Improvised Appliance for Continuous Extension of Fractured Leg. (Nouvel appareil de fortune à extension continue pour fracture de jambe.) R. Lhomme.
65 Remarkably Well-Organized Public Health Service in the Channel Islands. (L'organisation sanitaire et l'hygiène dans les îles Anglo-Normandes.) A. Rochaix.
66 Stovain. (L'action de la stovaine dans des solutions de concentration différentes sur la conductibilité et l'excitabilité des nerfs à myéline.) E. G. Socor.

61. **Leprosy and Its Prophylaxis.**—Jeanselme states that leprosy seems to be endemic in the French colonies but that nothing is being done in the way of prophylaxis except in Madagascar where efficient measures have long been in vogue. In New Caledonia he estimates that there are about 1,000 lepers among the 13,460 inhabitants; 137 white lepers are isolated but nothing of the kind is attempted with the natives, and no prophylactic measures have been introduced in French China where there are probably 15,000 lepers. The Société de Pathologie exotique recently passed resolutions that leprosy should be made a notifiable disease and surveillance be kept over those affected, to exclude them from schools and certain employments, and that the foundation of private sanatoriums for lepers should be encouraged, and lepers should be refused admission to France. Jeanselme comments on these resolutions that it is practically impossible to keep a well-to-do leper from entering France, and that the disease frequently escapes detection in the medical examination of emigrants.

Revue de Médecine, Paris

December, XXXI, No. 12, pp. 841-924

67 *Epilepsy at 55; Inflammation with Focus of Softening from Encephalitis in Zone of Wernicke. (Une observation d'épilepsie tardive avec autopsie. Considérations sur sa pathogénie.) F. Moutsset, L. Nové-Josserand and Bouchut.
68 *Treatment of Tuberculosis During the Nineteenth Century. (La phthisiothérapie au XIXe siècle. De la saignée au sanatorium.) M. Piéry and J. Roshem.

67. **Tardy Epilepsy.**—In the case reported a bachelor traveling man developed epilepsy at 55, and necropsy three years later revealed softening of the cortex in the zone of Wernicke, the acute encephalitis involving the tissues around the focus of softening but the convolution of Broca was intact. Comparing this with other cases of tardy epilepsy on record indicates that some predisposition on the part of the cortex seems to be necessary for epilepsy to develop from encephalitis, either an inherited taint or some trace of injury of the cortex dating from childhood.

68. **Historical Sketch of the Treatment of Tuberculosis.**—The first part of this sketch was published in the September number and discussed the treatment customary among the ancients and in the orient. The second part brought the subject through the middle ages in Europe, and this part deals with the treatment of tuberculosis from the beginning of the nineteenth century to 1880, the dawn of the modern era.

Semaine Médicale, Paris

January 3, XXXII, No. 1, pp. 3-12

69 *Decapsulation of the Kidney and Its Results in Puerperal Eclampsia. (La décapsulation rénale et ses résultats dans l'éclampsie puerpérale.) R. De Bovis.

69. **Decapsulation of the Kidney and Its Results in Puerperal Eclampsia.**—De Bovis has found ninety-two cases on record in which decapsulation of the kidneys was applied in treatment of puerperal eclampsia. The mortality recorded was 38 per cent., but probably 40 per cent. is not too small an estimate, as probably not all the fatalities have been published. He says that the experimental research reported to date has failed to confirm any beneficial action from decapsulation of the eclamptic kidney, and that the clinical experiences that have been published do not present the subject in a much better light. Cholmogorov thinks that a coincidence rather than cause and effect is the explanation of the benefit sometimes observed; in one of his cases the eclampsia was very severe but a marked turn for the better was at once apparent after the decapsulation. In a second similar case he was preparing to do the decapsulation but just before commencing it a similar remarkable change for the better was evident and complete recovery followed. If the operation had been done as contemplated, the benefit would have been ascribed natur-

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ally to the decapsulation. Even although the operation may restore kidney functioning to normal, yet it can have no effect on the patches of necrosis in the liver and the petechial hemorrhages in the brain. Recovery from eclampsia is not a question of diuresis alone. De Bovis thinks that for the present renal decapsulation in eclampsia will have to be discarded unless we learn to distinguish the cases in which congestion or lesions in the kidney are the main or sole source of trouble; it is evidently in cases like this that benefit has been realized so far. This assumption is sustained by recent research on dogs reported by Ilin in Russia and Ehrenfest in this country.

Archiv für klinische Chirurgie, Berlin

XCVI, No. 3, pp. 557-823. Last indexed December 9, p. 1951

70 *Surgical Treatment of Acute Pancreatitis. (Die chirurgische Behandlung der acuten Pankreatitis.) W. Körte.
71 *Muscles as Cause of Contracture Originating in Joints. (Die polyarticulären Muskeln als Ursache der arthrogenen Contracturen.) M. Jansen.
72 Solitary Gall-Stone in Liver. (Fall von solitärem durch Operation entfernten intrahepatischen Gallenstein.) Y. Noguchi.
73 *Lumbar Incision for Cholecystectomy. (Zur Bewerthung der modificirten Lumbalmethode der Gallenblasenexstirpation.) N. P. Trinkler.
74 Bilateral Hip Joint Disease in Young Adults. (Ueber Osteoarthritis coxae juvenilis duplex.) G. Wolfsohn and S. Brandenstein.
75 *Traumatic Rupture of the Kidney. (Zur Frage der traumatischen Nierenrupturen.) F. Michelsson.
76 Pigment Production and Pathogenic Properties of Staphylococci. (Ueber die Farbstoffproduction und Pathogenität der Staphylokokken.) Y. Noguchi.
77 Sugar in Treatment of Peritonitis. (Die Zuckerbehandlung der Bauchfellentzündung.) F. Kuhn. To be concluded in next number.
78 Laceration of Crucial Ligaments. (Ueber Abreissung der Ligamenta cruciata des Kniegelenks.) F. C. Schulz.

70. **Surgical Treatment of Acute Pancreatitis.**—Körte reports forty-four cases and remarks that the results are growing constantly better with time. The great trouble is that we have not as yet any reliable test for acute disease of the pancreas, and each case makes great demands on the intuition and skill of the medical attendant. He operated in thirty-four of his cases and eighteen patients were saved. All but fourteen of the forty-four patients were men, the youngest 16, the oldest, 70 years of age. In nearly every instance there had been numerous attacks of pain in the region, but generally mild and the pains had been ascribed to the stomach or to gall-stones by most of the patients. In three cases necropsy revealed a duodenal ulcer. Cholelithiasis is the usual cause of pancreatitis, and the pancreas should always be examined at a gall-stone operation.

71. **The Muscles as Cause of Joint Contracture.**—Jansen refers to the muscle that is attached far above and far below the joint, passing over it like a bridge. The rectus cruris is a good example of a polyarticular muscle of the kind, thus bridging both knee and hip joint. When an underlying joint becomes diseased, the muscles limited to this joint suffer with it and atrophy, while the long muscle bridging it is not affected. As these muscles have a predominantly contracting function, atrophy of the mono-articular muscle leaves them in control. This explains the typical attitude with arthrogenous contracture and the muscle factor explains its obstinacy.

73. **Lumbar Incision for Cholecystectomy.**—Trinkler reports two cases and extols the advantages of this technic; the right rectus muscle does not have to be cut and the intercostal nerves are left intact; no opportunity for postoperative hernia is left, while the provision for drainage is far better.

75. **Traumatic Rupture of the Kidney.**—Michelsson reports thirty cases with arguments to sustain his assertion that treatment should be expectant, with strict bed-rest and firm compression of the lumbar region unless hematuria compels immediate operative intervention. Anuria or laceration of the peritoneum alone does not indicate an immediate operation. Catheterization of bladder or ureters should not be done unless under urgent indications. If the ruptured kidney becomes infected, then operative measures are required at once. During the last twenty years there have been thirty cases of the kind at the public hospital at Riga, but no operation was done in any instance. All the patients recovered but three who succumbed to concomitant injuries elsewhere.

Beiträge zur Geburtshilfe und Gynækologie, Leipsic

XVII, No. 1, pp. 1-136. Last indexed Oct. 7, 1911, p. 1247

79 Deformities in the Amnion. (Ueber Amnionanomalien.) A. Stinzfrey.
80 The Sweat Glands in Pregnancy. (Der Schweissdrüsen-Apparat während der normalen und der pathologischen Schwangerschaft.) S. Rebandi.
81 *Nature of Rachitis and Osteomalacia. M. Ogata.
82 Rachitic Osteomalacia. (Beitrag zu den klinischen und pathologischen Untersuchungen bei der rachitischen Osteomalacie.) M. Ogata, K. Minakuchi and K. Kaji.
83 Gynecology in the Middle Ages. (Die gynäkologischen Kenntnisse des Mittelalters.) P. Diepgen.
84 Giant Children. (Riesenkinder.) M. Oyamada.

81. **Essential Nature of Rachitis and Osteomalacia.**—Ogata presents a study of an almost endemic affection in a certain province in Japan, the symptoms suggesting severe rachitis or infantile osteomalacia. He is inclined to regard the syndrome as a general trophic disturbance. The bones receive an exaggerated blood-supply and this upsets the balance between the depositing and absorption of calcium. This assumption explains the connection between puberty and pregnancy and the osteomalacia, and the reason why after puberty it is restricted to the female sex. Ogata regards rachitis and osteomalacia as essentially of the same nature, and states that he has often encountered the symptoms of both in one patient; in fact, he would drop the term rachitis entirely and use merely osteomalacia, classifying it as in children, non-puerperal and pregnancy or puerperal osteomalacia. The microscopic findings in the ovaries from fifteen patients with osteomalacia showed numerous follicular cysts, abnormal vascularization and contorted vessels, extravasation of blood, thickening of the vessel walls and their obliteration, and hyaline degeneration. The intensity of the changes corresponded to the severity of the osteomalacia. The question now is whether these changes are primary or secondary; he had no opportunity to examine the ovaries in incipient cases.

Beitrage zur klinischen Chirurgie, Tübingen

November, LXXVI, No. 2, pp. 241-544

85 Operative Treatment of Dislocation of the Eyeball. (Ueber operative Behandlung der Dislocatio bulbi.) G. Perthes.
86 Cure of Stiff Knee by Interposition of Tissue. (Ueber operative Kniegelenksmobilisierung und Funktionsherstellung durch Amnioninterposition.) H. Schmerz.
87 Congenital Dislocation of the Patella. (Ueber kongenitale Patellarluxationen.) M. Flebach.
88 Treatment of Spina Bifida. W. Brodmann.
89 *Ultimate Results of Operations for Gastric and Duodenal Ulcers. (Studien über die Ergebnisse der chirurgischen Behandlung des Magen- und Duodenalgeschwürs mit ihren nicht-akuten Komplikationen.) G. Petren.
90 Treatment of Simple Laceration of Duodenum and Pancreas. (Beitrag zur Behandlung der subkutanen Duodenum- und Pankreaszerreissung.) F. Kroiss.
91 Thymol for Sterilization of Field of Operation. (Experimentelles und Klinisches zur Desinfektion des Operationsfeldes mit Thymol-Spiritus.) A. Hoffmann.
92 Diagnosis of Tuberculosis of Urinary Apparatus. (Diagnose der schweren tuberkulösen Affektionen der Nieren und Harnwege.) B. Cholzoff.
93 Fracture of Femur with Atrophy of Bone and Contracture of Knee. (Eine typische Oberschenkelfraktur bei Knochenatrophie und Kniegelenkskontraktur.) R. Hagemann.
94 Megacolon. (Zur Diagnose und Therapie der Hirschsprung'schen Krankheit.) H. Hoffmann.

89. **Remote Results of Operations for Gastric and Duodenal Ulcers.**—A previous compilation by Petren of 100 cases of perforated ulcer was reviewed in THE JOURNAL, June 3, 1911, page 1691. He here devotes 172 pages to a compilation of cases without perforation in which an operation was done; the data are from Lund and fifteen other Swedish hospitals. Forty died of the 283 patients, and he has obtained information in regard to the condition later of 243 patients, including forty-five he was able to reexamine personally. Among the lessons taught by this material is that freedom from symptoms for years after a gastro-enterostomy is no guarantee that cancer will not develop later; malignant disease followed in at least 5.5 per cent. of the cases. He devotes considerable space to interpretation of the roentgenoscopic findings.

Berliner klinische Wochenschrift

January 1, XLIX, No. 1, pp. 1-48

95 *Differentiation of Neurasthenia and Endogenous Depression. K. Bonhoeffer.
96 *Application of Chemotherapy to Cancer. (Chemotherapeutische Versuche an tumorkranken Tieren.) A. v. Wassermann and D. v. Hansemann.
97 *Permanent Cure of Sarcoma by Roentgen Rays. (Dauererfolge bei der Röntgentherapie von Sarkomen.) M. L.-Dorn.
98 Cultivation of Living Cells. (Die Kultur lebender Körperzellen.) S. Hadda.

99 Sleeping Sickness in New Cameroon. (Die Schlafkrankheit in Neu-Kamerun und die Aussichten ihrer Bekämpfung.) C. Schilling.

100 Lipuria with Chronic Parenchymatous Nephritis. (Lipurie bei chronischer parenchymatöser Nephritis.) F. X. W. O. Kidder.

101 Roentgenoscopy of Jaws and Teeth. (Die Röntgographie der Kiefer und Zähne.) F. Proell.

95. **Differentiation of Neurasthenia and Endogenous Depression.**—Bonhoeffer remarks that numbers of patients with the diagnosis of neurasthenia are sent to the clinic for nervous and mental diseases in his charge at Breslau, while at the clinic the diagnosis of neurasthenia is rarely made. One reason for its frequency outside is evidently to tranquilize the patient and his family, but the principal reason is that the symptoms suggesting neurasthenia merely mask some organic trouble, a latent cancer, diabetes, mild exophthalmic goiter, a brain tumor, multiple sclerosis, progressive paralysis, alcoholism or some other toxic process. This explains the vagueness of the prognosis in neurasthenia, and the prevailing view that "almost anything can develop out of neurasthenia." Cases of suicide in neurasthenia have been reported, but Bonhoeffer declares that when there is a serious attempt at suicide under these conditions, the trouble is not neurasthenia. Correct differentiation of endogenous depression from neurasthenia is essential for prognosis and treatment, and he gives a list of criteria to distinguish the former, especially the sudden onset and often sudden cessation, an inherited taint, a constitutional tendency to periodical disturbances, particularly recurring moods of depression, periodic sleeplessness, periodic periods of apprehension, periodic attacks of diarrhea, of urticaria, asthma, etc. The periodic attacks may appear under a different guise each time; only the mood of depression is constant. The great danger is that the patient may commit suicide or that a manic-depressive condition may eventually develop. Three cases are described in detail and the fact emphasized that these patients feel worse in the morning, gradually improving during the day until by evening they feel quite well and able to work. Veraguth has recently cited this reversal of normal conditions in this respect as typical of neurasthenia, but Bonhoeffer insists that endogenous depression, not neurasthenia, is responsible for it. When there is a history of suicides in the family, as in the first case described, precautions must be redoubled. In the second case a typical condition of depression had developed in a young man with a tendency to hypomania; the third case was a typical instance of cyclothymia. The cases teach that apparently local nervous stomach and heart disturbances may be only a manifestation of the endogenous trouble and do not require treatment; this should be directed to the underlying cause.

96. **Chemotherapy for Cancer in Mice.**—This communication was summarized in the Berlin Letter in THE JOURNAL, January 13, p. 1892.

97. **Roentgentherapy of Sarcoma.**—Levy-Dorn states that he has two patients who are still free from recurrence over six years after *x*-ray treatment of cancerous glands in the neck in one, and of a periosteal sarcoma of the thigh in the other. The patients were 26 and 17 years old at the time of operation.

Correspondenz-Blatt für Schweizer Aerzte, Basel

December 20, XLI, No. 36, pp. 1265-1296

102 *Treatment of Tuberculosis of the Kidney. (Soll die Nierentuberkulose chirurgisch behandelt werden?) H. Wildbolz.

103 Advantages of Reducing Total Ration in Severe Cases of Diabetes. (Ueber das reduzierte Kostmass in schweren Fällen von Diabetes mellitus.) E. Bernoulli.

January 1, XLII, No. 1, pp. 1-32

104 *Specific Treatment of Ringworm and Allied Mycoses. (Die Trichophytien und verwandte Pilzerkrankungen der Haut.) B. Bloch.

105 *Pyelitis from Infection of Lacerations of the Hymen. (Ueber Defiorationspyelitis.) H. Wildbolz.

102. **Treatment of Tuberculosis of the Kidney.**—Wildbolz used to insist that operative measures should not be applied in renal tuberculosis until after failure of persevering medical treatment, but the recent discussions at gatherings of urologists of the ultimate results of nephrectomy have converted him to the view that the surgeon should be called in as soon as tuberculosis of the kidney is diagnosed. Israel has recently reported the remote results of 1,023 nephrectomies done by twenty-one surgeons besides himself. About 25 per cent. of the patients succumbed to the progress of the tuberculosis, about half of these within six months and most of the others within one or two years. Wildbolz had about the same percentage in his 139 cases: With an operative mortality of 2.8 per cent., 14.4 per cent. succumbed to the tuberculosis, all but three of this group of twenty dying within two years. The lungs were mostly responsible for the fatality, the other kidney becoming tuberculous only in the rarest cases, not in over 1.6 per cent. In none of the total statistics did the bladder become tuberculous when it had been normal before the operation. In 63.8 per cent. of Israel's own 170 cases no tubercle bacilli could be found in the urine thereafter, and Wildbolz found 58.9 per cent. of seventy-eight patients living over three years after nephrectomy, entirely cured, while 19.2 per cent. had died and 21.7 per cent. still show signs of tuberculosis. The results of operative treatment are thus far from ideal, he states, but comparison with the remote results of conservative measures in 316 cases under observation for over two years, reported to him by various Swiss confrères, sustains the advantages of prompt surgical treatment. Almost 70 per cent. of the 316 patients had died by the end of the two years and sixty-eight of the ninety-eight survivors show signs of severe tuberculosis of the urinary apparatus. Only thirty of the 316 have no subjective symptoms of their renal tuberculosis, and an objective examination was impossible. In sixteen of the thirty cases this clinical cure had persisted for over five years, but in many instances after years of apparent recovery there was a sudden breakdown and death from uremia. Tuberculin seems to have a favorable influence on the general condition and the subjective symptoms, but its action on the local process is apparently slight. On the whole, the permanent cures of 50 or 60 per cent. under operative measures compares instructively with the 40 per cent. under conservative measures—which includes only a very few clinical recoveries—and confirms the assumptions of those who teach that the earlier the tuberculous kidney is removed, the better the ultimate outlook. Wildbolz emphasizes in conclusion that after nephrectomy the patient is still a tuberculized individual and requires treatment as such, supplying the most favorable conditions for the healing of the tuberculous foci elsewhere in the body. The importance of this after-care is shown by the great difference between the ultimate outcome after nephrectomy in well-to-do patients and in the poor; among the former 78.8 per cent. cured; among the latter only 37.7 per cent. Zuckerkandl has reported a tardy mortality of only 6.4 per cent. among his private patients, but 16.4 per cent. among the charity patients, while Israel reported a difference between 4.8 per cent. and 12.7 per cent. respectively.

104. **Specific Treatment of Ringworm.**—Bloch produces a fluid containing the toxins and endotoxins of the trichophyton fungi by grinding up old bouillon cultures of trichophyton strains with the culture medium and filtering through a Chamberland bougie. This fluid he calls trichophytin, in analogy to tuberculin; it works in the ringworm patients as tuberculin works in the tuberculous, and he thinks that it may prove a specific for treatment of ringworm. He has not been able to attain similar results with favus and microsporon affections; they are too torpid, probably, to be reached in this way. His experiments with guinea-pigs confirmed the efficacy of the trichophytin. These animals are absolutely immune to new infection anywhere on the body after they have recovered from ringworm, but they are left hypersensitive so that a specific local reaction follows injection or frictions with trichophytin. In the clinic he has succeeded in curing a number of ringworm patients by injecting the filtrate of the trichophyton cultures into the sound skin or the trichophyton focus. In a case of kerion caused by the *Trichophyton rosaceum*, no reaction followed injection of trichophytin but he cured the process by inoculating a sound spot on the skin with another living trichophyton fungus, *Achorion quinckeanum*. This second focus modified the body, transforming it in such a way that it became hypersensitive, even at the first spontaneous focus, and thus a permanent cure resulted.

105. **Pyelitis from Colon Bacillus Infection of Lacerated Hymen.**—Wildbolz states that his attention was called to the

connection between defloration and pyelitis by three cases of acute pyelitis developing in recently married women who had had a kidney removed previously for tuberculosis. The natural assumption was that the tuberculosis had flared up again, but in each case the trouble was traced to a simple colon bacillus infection of the bladder and kidney pelvis, and recovery soon followed. None of the husbands of these patients suffered from urethritis. The same findings were noted also in five other brides who had never had symptoms from the urinary apparatus before, and the colon bacillus was the causal germ in each case. The pyelitis was always unilateral, and he thinks that the connection between the defloration and the pyelitis is more than probable. This view is sustained by recurring coli pyelitis in a married woman with kraurosis vulvæ and senile atrophy of the vagina. From superficial lesions of the epithelium the colon bacillus infected the urinary passages with pyelitis in the right kidney, recurring four times. The knowledge of pyelitis of this origin is important as otherwise the gonococci are liable to be ineriminated. Instead of expectant treatment for the assumed gonorrhea, vigorous local treatment should be instituted if internal medication does not speedily sterilize the urinary passages. It is possible that the pyelitis of pregnancy may owe its origin to a colon bacillus infection of the kidney pelvis starting in the lacerations of the hymen.

Deutsche medizinische Wochenschrift, Berlin

December 28, XXXVII, No. 52, pp. 2409-2440

106 *The Diet in Kidney Disease. (Die Diät bei Nierenkrankheiten —besonders bei Nierenentzündungen.) H. Strauss.
107 *Alcohol Injections in Treatment of Trifacial Neuralgia. (Ueber die Behandlung von Neuralgien des 2. und 3. Trigeminusastes mit Alkoholinjektionen.) H. Braun.
108 Recent Progress in Surgery of Peripheral Nerves. (Die Chirurgie der peripherischen Nerven.) Berger.
109 Pregnancy Dermatosis Cured by Injection of Normal Horse Serum. (Mit Pferdeserum geheilte Schwangerschaftstoxikose.) R. Freund.
110 *Two-Route Method of Treating Local Infectious Processes. (Die Behandlung der Kehlkopftuberkulose und anderer lokalinfektiöser Prozesse mit Jodnatrium und Ozon bzw. Wasserstoffsuperoxyd.) S. A. Pfannenstill.
111 Man with Complete Female External Genitals. (Spermasekretion aus einer weiblichen Harnröhre.) M. Hirschfeld and E. Buchard.
112 *Physicians in Germany. (Die Aerzte Deutschlands.) F. Prinzing.

106. **The Diet with Kidney Disease.**—Strauss discusses the diet that will spare the kidneys the most and prevent uremia and hydrops, emphasizing the necessity for discriminating between the indications in the individual cases and between different periods in the individual case. He thinks that the discrimination between red and white meat is useful only in that white meat is generally more digestible than red; boiled meats are better than others as they contain less of the harmful extractives. He sees no harm in from two to four eggs a day; the heat in cooking modifies the albumin, so that it loses its specific harmfulness in this respect. In all his experience he has encountered only two cases which suggested possible alimentary albuminuria. In nephritis he uses for saline infusion or proctoclysis an isotonic sugar solution or water alone. Of an exclusive milk diet he remarks that its greatest benefit is from the resulting flushing of the kidneys and of the entire organism. The danger of dropsy from considerable intake of water is less than the danger of uremia; even if dropsy is induced by the ingested fluid, we have abundance of means to control it, while with uremia we are comparatively helpless. Patients with chronic nephritis and dropsy are much less liable to uremia than with "dry" nephritis. Salt is not the only factor in hydrops, but it is such an important one that removal of this link in the chain is one of the main points in treatment of nephritis with a tendency to dropsy. The food is best prepared entirely without salt, and the modicum of salt permitted is given the patient to season his food as he likes. The amount should not be over 2.5 gm. a day in severe cases of parenchymatous nephritis with much dropsy, or when it is feared that dropsy is impending. In moderate cases he allows up to 5 gm. a day; weighing the patient every second day reveals the tendency to dropsy and the progress of treatment. Fruits, preserves, salads and articles made of flour contain naturally very little salt; the bread should be made without any salt. If eaten with unsalted cheese or marmalade, the salt is not missed. Strauss adds a list of ordinary articles of food with their per cent. of salt. The yolk of egg, for example, averages only 0.009 per cent. salt while the white averages 0.31 per cent. Meat averages between 0.1 and 0.2 per cent., but calves' kidneys contain 0.32 per cent. and smoked meat much more; oatmeal, cabbage and celery, between 0.2 and 0.5 per cent., and tea and coffee between 0.5 and 0.15 per cent. The general principle in diet selection is that efforts to spare the kidney and ward off dropsy are indicated in the parenchymatous processes while in the indurative and vascular forms, measures to ward off uremia should predominate. Overeating is particularly harmful, especially on account of its taxing the heart; this is particularly liable to occur when the patients are kept in bed. At the same time he warns of the necessity for ample nourishment, emphasizing in this respect especially the albuminuria that develops from a constitutional cause, instead of nephritis, such as orthostatic, lordotic or puberty albuminuria.

107. **Alcohol Injections for Trifacial Neuralgia.**—Braun gives a few technical points to simplify this method of destroying the nerve root with alcohol. [Compare with Patrick's latest article in THE JOURNAL, Jan. 20, 1912, p. 160, and with Offerhaus, Abstract 74, p. 1152, in THE JOURNAL, Sept. 24, 1910.] Braun says that the effect amounts practically to a resection of the nerve, adding that Schlösser has reported application of the method in 123 cases of facial neuralgia and all the patients but seven were cured, for an average of ten months or permanently. In case of recurrence, repetition of the injection is simple and effectual. Kiliani had only five failures in 190 cases, and Ostwalt only four in forty-five cases. Braun urges wider application of this method of blocking the second or third branch of the trifacial nerve in the foramen rotundum or ovale, saying that the method might be useful also for operations on the face, extraction of teeth, etc. He gives illustrations to show the mode of access, and advises experimenting with an anesthetic plus epinephrin solution for transient anesthesia of the regions involved, before attempting to inject the alcohol. He introduces the needle just below the malar bone down to the sphenomaxillary fossa, striking the second division as it emerges from the foramen. Paresthesia in the upper teeth warns the patient that the nerve has been reached, and the operator should wait for this. The foramen ovale is reached by introducing the needle at the middle of the lower border of the zygomatic arch, just in front of the jaw. The needle, inserted at a right angle to the head, strikes bone at a depth of about 5 cm.; the foramen ovale is just back of the bone. The needle is partly withdrawn and tilted forward and it is then pushed in again, the tip farther back, to exactly the same depth. Paresthesia in the lower jaw warns that the third division of the fifth nerve has been reached. Braun uses a graduated needle, 8 cm. long and 0.7 mm. in diameter. He has a skull with a needle passed into the foramen stand just back of the patient's head, to aid him in locating the foramen. He introduces the needle through a little novocain solution injected into the skin, as otherwise the introduction of the needle is rather painful. When the needle is in place he injects a few c.c. of a 2 per cent. novocain-suprarenin solution and waits a few minutes before injecting the alcohol, and then injects 2 c.c. of 96 per cent. alcohol. This prevents the sharp pain liable when the alcohol alone is injected. He has never found it necessary to make the calculations suggested by Offerhaus. He advises against applying the alcohol method of blocking the nerve to the first division of the fifth nerve on account of the danger to other nerves in the orbit.

110. **Two-Route Method of Treating Laryngeal Tuberculosis, Etc.**—Pfannenstill's method was described in THE JOURNAL, July 16, 1910, p. 264. He gives potassium iodid internally and applies ozone or hydrogen dioxid externally to the lesion, the combination of the two drugs in the lesion generating nascent iodin. He here relates experiences with the method in laryngeal and superficial tuberculous processes, lupus of the nasal mucosa, leg ulcers, etc. He commences with 3 gm. of potassium iodid daily, fractioned, and applies continuously the ozone or hydrogen peroxid in a 2 or 3 per cent. solution, acidified with 1 per cent. acid. The treatment is effective only

when there is local ulceration; it has no influence on diphtheritic lesions, for instance.

112. See Berlin Letter in THE JOURNAL, Jan. 20, 1912, p. 209.

Jahrbuch für Kinderheilkunde, Berlin

December, LXXIV, No. 6, pp. 627-776

113 *Chronic Bronchiolectasia. H. Vogt.
114 *Research on Metabolism of Normal Artificially Fed Infant. (Der Gesamtstoffwechsel eines künstlich genährten Säuglings. Mit Einschluss des respiratorischen Stoffwechsels.) A. Niemann. Concluded.
115 *Cystitis in Male Infants. (Zur Aetiologie der Cystitis bei Knaben im Säuglingsalter.) E. Rach and A. v. Reuss.
116 *Depressing Action of Hot Weather on Gastric Secretion. (Die Einwirkung hoher Aussenhuftemperaturen auf die sekretorische Tätigkeit des Magens.) V. Salle.

113. **Chronic Bronchiolectasia.**—Vogt thinks that the chronic course liable with bronchopneumonia, in contrast to the comparatively brief course of lobar bronchopneumonia, is due to permanent injury of parts of the lung. Careful examination after the supposed complete clinical recovery may reveal moist râles, indicating a permanent focus that may flare up again on slight provocation. He cites a few typical cases of this. The left lobe is the one generally affected and roentgenoscopy is often a valuable aid for the diagnosis. The most probable assumption is that some of the smaller bronchi are left permanently diseased and enlarged; this is particularly liable when influenza bacilli are involved, either alone or in mixed infection. The tendency to the chronic affection is more marked the younger the children. In eighteen of twenty children with recurring bronchopneumonia, the first attack occurred before the age of 6, in nine before the children were 2 years old. The acute onset and apparently complete subsidence speak against a tuberculous nature of the trouble. He reports the details of twenty-five cases of chronic bronchopneumonia with acute exacerbations which he has encountered in the last eighteen months. Drugs may reduce the amount and putridity of the sputum, but this is all that can be expected of them. Mechanical surgical measures alone offer the only chances of radical cure in the cases that show no tendency to spontaneous recovery.

114. **Metabolic Findings in Normal, Artificially Fed Infant.**—Niemann's extensive monograph gives the metabolic findings, over long periods, of a bottle infant on various artificial foods. The tables provide a standard for comparison in morbid conditions, and throw light on certain laws regulating the vital processes.

115. **Cystitis in Male Infants.**—In the two cases reported fever and general symptoms developed suddenly, followed in a few days by jaundice and cystitis and this in turn by pyelonephritis, the children dying a few days later. Intestinal catarrh was found in both at necropsy. In a third case a robust baby, five months old, developed an intestinal affection with fulminating fever and cystitis soon followed. In the latter case the cystitis was manifestly secondary to the bowel trouble and this assumption is probable for the others, as the same bacteria were found in both intestine and bladder. In the third case the proteus was involved, and the case teaches the extremely unfavorable effect of a diet rich in protein in the presence of the proteus. The food used was a casein-fat suspension, free from whey—the von Reuss-Sperk mixture—and, after the first week, breast milk. The child had been breast-fed until 3 months old, and had been given diluted cow's milk with cocoa on which it seemed to be thriving finely.

116. **Action of Hot Weather on Gastric Secretion.**—Salle experimented with young dogs, keeping them in an incubator for periods and at temperatures corresponding to the hot weather of last summer. The gastric secretion was studied by means of a Pawlow fistula. His aim was to ascertain whether the heat had a special depressing action on the stomach functioning and what changes it induced. The results reported and condensed in diagrams show that the secretory function is materially depressed by heat and dryness of the air; the secretion of gastric juice becomes less and less as also its digestive power. The dogs lost rapidly in weight, their temperature rose, and diarrhea and vomiting followed—in short, they presented disturbances remarkably like those of summer diarrhea in infants. The experiences related confirm the danger from excessive loss of fluids during the hot weather, and the exaggeration of this danger when the air is unusually free from moisture. Some of the charts at the recent Hygiene Exhibition at Dresden showed in various countries how the highest summer infant mortality coincided with an unusual lack of moisture in the air. All the research reported emphasizes the necessity for supplying fluids to infants in hot weather.

Medizinische Klinik, Berlin

December 31, VII, No. 53, pp. 2045-2060 and Supplement

117 Cancer of Lower Bowel. (Ueber die bösartigen Geschwülste der unteren Darmabschnitte.) H. Wolff.
118 Etiology of Appendicitis. Oberndorfer.
119 *Autoplastic Method of Lengthening Long Bones. (Vorschlag einer autoplastischen Methode zur Verlängerung von Röhrenknochen.) R. Müller.
120 *Pernicious Anemia. J. Hürter.

119. **Autoplastic Method of Lengthening Long Bones.**—Müller saws the leg half way across, then he saws it longitudinally at right angles to the first cut, and for a little longer distance. Then he saws the other half of the bone, the stumps thus being cut apart as with two steps. The stumps are then drawn apart until they touch only at the two corners of the steps. The square gap thus left on each side is filled by a square of bone cut out of the shaft some distance above and another also below. Müller has had no clinical experience with the method, but the results on animals and the cadaver have been encouraging.

120. **Pernicious Anemia.**—Hürter's article is a postgraduate lecture, based on thirty-five personal cases and much experimental research. Although no effectual treatment is known, he says, yet a number of empirical measures have proved useful and, strictly applied, occasionally recoveries have been observed under them. Chief among them is bed rest, but the patients often rebel against this as they feel well. He advises keeping the patients in bed until the blood shows a marked change for the better. Repose in the open air may advantageously alternate with bed rest. Light massage may be useful. Thorough examination for possible intestinal parasites is the first measure, and it is necessary to investigate the stomach functioning to remedy the individual deficiencies. In regard to diet, stimulation of the appetite is of predominant importance; fruit juices and lemonade should be freely allowed. With simple gastric achylia, lavage of the fasting stomach in the morning with physiologic salt solution often proves useful. The food should be extremely nourishing and digestible, and nutrient enemas sometimes are valuable to supplement the ordinary food. Hürter is inclined to regard transfusion of blood as a valuable adjuvant; he does not wait too long, but makes the transfusion as soon as the blood picture ceases to show evidences of regeneration. He injects 200 or 250 c.c. of blood and states that symptoms of anaphylaxis have never been observed. Unless sure of one's technic and assistance, the blood had better be defibrinated, but the natural blood should be preferred. He follows the Moritz method of transfusion, using a 100 c.c. syringe. He adds that in two of his thirty-five cases dyspnea followed the transfusion. In one case it suggested pulmonary embolism at first, but it rapidly subsided. In the second case the patient died two days later and peculiar foci were found in the lungs; they were not typical of embolism but suggested intravascular coagulation. No by-effects were ever noted with defibrinated blood. He has observed transient improvement in the blood-picture under administration of bone-marrow, and as we need all the leverage power possible to aid in starting the regeneration of the blood, he advises using this organotherapy. He gives generally 30 or 40 gm. of the fresh bone-marrow from calves, generally in tablets made with 90 parts marrow, 30 parts port wine, 30 parts glycerin and 20 parts gelatin, mixing the marrow with the wine in one hot mortar, and the glycerin and gelatin in another, and then combining. Barr says that such tablets will keep for months. Hürter concludes with a reference to glycerin, stating that he has a vague impression that some benefit was apparent from glycerin given in large doses during the day—30 gm. in lemon juice, 20 gm. in capsules and 30 gm. by the rectum.

V. 5
1912

Monatsschrift für Geburtshülfe und Gynäkologie, Berlin

December, XXXIV, No. 6, pp. 621-738

121 Menstrual Changes in Uterine Mucosa. (Die menstruellen Veränderungen der Uterusschleimhaut.) R. Keller and G. Schickele.

122 Congenital Prolapse of the Uterus. (Ueber den kongenitalen Prolaps. Beitrag zur Aetiologie der weiblichen Genitalprolapse.) R. Graf.

123 *Traumatic Rupture of the Pregnant Uterus. (Traumatische Uterusruptur in der Schwangerschaft.) H. Hinterstoisser.

124 *Febrile Abortion. (Die Bewertung und die Behandlung des fieberhaften Abortes.) F. Fromme.

125 Ascending Urogenital Tuberculosis in Women. (Zur Frage der aszendierende Urogenitaltuberkulose beim Weibe.) S. Sugimura.

126 Atresia of Duodenum Fatal in One Week After Birth. (Atresia duodeni als Todesursache bei einem Neugeborenen von 7 Tagen.) H. Hauser.

127 Sarcoma in Wall of Ovarian Cyst. (Spindelzellensarkom in der Wand einer papillären Parovarialcyste.) F. Goldschmidt.

128 Typhoid Suppuration in Ovarian Dermoid Cyst. (Typhus-Vereiterung eines Ovarialdermoids.) L. A. Kriwsky.

129 *Experiences with Spinal Anesthesia. (Erfahrungen mit der Lumbalanästhesie.) W. Steuernagel.

123. **Traumatic Rupture of the Pregnant Uterus.**—Hinterstoisser has been able to find comparatively few cases of this kind on record. He summarizes them in connection with a case from his own experience in which he successfully removed the ruptured uterus with the fetus still in its membranes, although it had escaped through the rupture into the abdominal cavity and looked like a large cyst developing on the uterus. About the seventh month of the pregnancy the woman had been knocked down and trampled on by her husband; colic pains followed and hemorrhages for a month, then all trouble subsided and the woman felt well and attended to her work as a farmer's wife. A few months later the cramps and hemorrhage returned, cured by panhysterectomy. Rupture from indirect trauma, as from a jump or fall, is more frequent than from direct injury. The uterus ruptures in these cases lengthwise, in the anterior wall of the fundus. In some of the cases on record the rupture at the eighth month was successfully sutured. The prognosis is not always unfavorable; prompt operative treatment almost always proved successful.

124. **Febrile Abortion.**—Fromme begins by tamponing the cervix and vagina and giving ergot. If with these measures the os is still impermeable after twelve hours, he dilates with laminaria and then cautiously removes the retained portions of the placenta with the finger alone after thoroughly rinsing out the uterus. The curet is to be absolutely rejected.

129. **Spinal Anesthesia in Gynecology.**—Steuernagel states that the spinal technic has been applied about 700 times at the clinic in charge of Zangemeister, and he here reviews 320 gynecologic operations done with it. The anesthesia was not quite sufficient in twenty-three cases and by-effects were observed in fifty-nine, including vomiting in twenty-seven, headache in fifteen, collapse in four, nervous disturbances in three and nausea in eight, but no symptoms on the part of the lungs in any instance. In one case the electric heat for the operating table was turned on too strong and it was found at the close of the hour-long operation that the patient was severely burned in the back and thighs. The burns healed in time, but the case warns of the special danger of burning during spinal anesthesia. The nervous disturbances mentioned as occurring in three cases were slight paresis in one or both legs and sensory disturbances. In two of the cases conditions promptly returned to normal under electric treatment, but in the third case there were evidences of grave organic injury from the spinal anesthesia, weakness and pains in the legs, sensory disturbances and considerable paresis of the right leg. The symptoms gradually subsided by the end of the third month, when it was found that a purely hysterical affection had succeeded the organic disturbances. It is wiser, Steuernagel remarks, to exclude from the spinal technic all persons with a tendency to hysteria or neurasthenia. The failures in regard to the anesthesia are always among such persons. If this category of patients can be shut off from spinal anesthesia, he thinks that the method will be found far superior to other technics in all other cases. Septic processes, of course, contra-indicate it. The results with spinal anesthesia have been growing constantly better from year to year, but he doubts whether the method is ripe yet for general practice.

Münchener medizinische Wochenschrift

December 28, LVIII, No. 52, pp. 2786-2808

130 The Martyrdom of the Sexual Apparatus Through the Ages. (Das Martyrium des Sexualapparates.) A. Hegar.

131 *Anthrax. (Zur Klinik und Therapie des äusseren Milzbrandes.) H. Wolff and Wiewiorowski.

132 *Polycythemia. (Ueber Hyperglobulie.) F. Röver.

133 Diuretic Action of Radium. (Radiumemanation als Diuretikum.) L. Grön.

134 Green Urine. (Ausscheidung von Indigoblau im Harn.) P. Sommerfeld.

135 *To Facilitate Climbing Stairs. (Ein zusammenlegbarer Pantoffel zur Erleichterung des Treppensteigens.) E. F. Schurig.

136 Radiotherapy of Conjunctivitis and Rosacea. H. Axmann.

137 Technic for Transplantation of Joints. (Zur Frage der Transplantation des Intermediärknorpels.) H. Helferich.

131. **Treatment of Anthrax.**—Of the thirteen cases of anthrax reported in detail, six were very severe, but all terminated favorably. Conservative measures alone were applied in ten cases, merely absolute repose, suspension when necessary, and boric acid salve. The main point is to keep the part absolutely still. In one case excision of the lesion was followed by high fever and symptoms indicating that the bacilli had found their way into the blood. One patient was a butcher who developed extensive lesions on the arms after slaughtering a cow with anthrax.

132. **Polycythemia.**—Röver reports two new cases of polycythemia studied with the "hemodynamic method" like the four recently described by Plesch. The findings are tabulated under twenty-two headings, including a repetition of the tests in one case. The findings differed widely where the tests were repeated, showing how the conditions in regard to the circulation differ at different times in the same patient. The cases teach further that high saturation of the venous blood with oxygen is a sign of evil import in polycythemia as well as in other diseases.

135. **Stair Climbing Facilitated.**—Schurig states that when the steps are of the ordinary height, about 16 cm., the effort to lift up the body is too great for persons with heart disease. He supplies such patients with a kind of slipper, the sole of which raises the foot by 8 cm., while the slipper can be folded until it is not over 2 cm. thick and can be conveniently carried in the pocket. The right foot, in the slipper, steps close to the first stair; the left foot then steps on the first stair. The right foot, in its slipper, is then placed on the same stair, and the left foot in turn placed on the second stair. The slipper thus interposes a midway step, doubling the number of treads; the body thus has to be lifted only 8 cm. at each step, which immeasurably reduces the exertion in stair climbing.

Zeitschrift für Kinderheilkunde, Berlin

III, No. 4, pp. 313-390. Last indexed January 6, p. 73

138 *Pathogenesis of Digestive Disturbances in Infants. (II. Die qualitativ-quantitative Bestimmung flüchtiger Fettsäuren in den Destillaten der Vakuum-Dampfdestillation.) F. Edelstein and F. v. Csonka.

139 *Pathogenesis of Digestive Disturbances in Infants. (III and IV. Tierversuche über die Wirkung niederer organischer Säuren auf die Peristaltik.) H. Bardt and K. Bamberg.

140 *Pathogenesis of Digestive Disturbances in Infants. (V. Ueber die flüchtigen Fettsäuren im Mageninhalt gesunder Säuglinge.) K. Huldschinsky.

138-140. **Pathogenesis of Digestive Disturbances in Infants.**—The four articles here presented are the reports of research at the special infant-welfare institution known as the Kaiserin Auguste Victoria-Haus zur Bekämpfung der Säuglingssterblichkeit im Deutschen Reiche. The institution is in charge of Prof. Langstein, and it is rapidly accumulating valuable data on the origin of digestive disturbances in infants. The special points here discussed are the volatile fat acids in the stools, stomach content and milk; the action of organic salts on peristalsis as determined in experiments on animals, and the volatile fat acids in the stomach content of healthy infants.

Zentralblatt für Gynäkologie, Leipsic

December 30, XXXV, No. 52, pp. 1729-1760

141 *Secondary Tuberculosis of the Female Genital Organs. (Beitrag zur Lehre der sekundären Tuberkulose der weiblichen Genitalorgane.) N. I. Horizontow.

142 *Uncontrollable Vomiting with Hematometra. (Fall von unstillbarem Erbrechen bei Hämatometra.) M. Hirsch.

141. **Tuberculosis of Female Genitals.**—Horizontow examined the genital organs of thirty guinea-pigs and eleven rabbits which he had inoculated with tuberculosis, comparing the

findings with those in the genital organs of twenty-one women who had succumbed to tuberculosis. It seems to be beyond question, he says, that the female genital organs are extremely susceptible to secondary tuberculosis, and that tuberculous infection of the abdominal cavity is peculiarly important from this point of view. In the vagina, tubes and uterus the secondary tuberculous lesions are found mainly in the mucosa; in the ovaries, mainly in the stroma of the cortical layer. In animals, tubercles may develop in the follicular apparatus. The tuberculous changes in the genital organs are usually slight and can be seldom recognized without the microscope. In his experiments tubercle bacilli were sometimes found in the genital organs when there were no signs of tuberculous infection.

142. **Vomiting with Hematometra.**—The blood accumulated in the uterus simulated a three-months' pregnancy, both in the size of the uterus and general symptoms. Uncontrollable vomiting developed and persisted for over a month, with progressive debility, rapid loss of weight and increasing pulse-rate compelling evacuation of the supposed pregnant uterus. No trace of a fetus or fetal membranes was found, and after evacuation of a large amount of blood conditions promptly returned to normal. The distention of the uterus evidently induced irritation, setting up and maintaining the vomiting; no other possible cause could be discovered and this assumption was confirmed by the recovery at once on the evacuation of the uterus. The peripheral nervous system semmed to be normal, but the sympathetic system must have been exceptionally irritable; the patient had suffered from uncontrollable vomiting during her three pregnancies and her fourth pregnancy—after the hematometra experience—had to be interrupted for the same cause. In each instance the vomiting came on about a month after conception; her mother had had a similar experience.

Gazzetta degli Ospedali e delle Cliniche, Milan

December 28, XXXII, No. 156, pp. 1651-1658

143 Research on Resistance of the Blood Corpuscles in Jaundice. (Delle resistenze globulari negli itterici, ricercate sul sangue in toto e sulle emazie deplasmatizzate.) P. Biffi.

Policlinico, Rome

January, XIX, No. 1, pp. 1-40

144 *Treatment of Erysipelas. (La cura dell'eresipela.) T. Pontano.

144. **Treatment of Erysipelas.**—Pontano states that from January, 1909, to August, 1911, there were 1,084 erysipelas patients at the Rome policlinic; eighty-seven patients died, but in only forty-seven cases was the erysipelas directly responsible for the death. In this group the erysipelas was of a septic or gangrenous form or there was a kidney or lung affection. This mortality of 8.02 per cent. is about the same as is observed elsewhere; it is made up mostly of aged or much debilitated patients. It seems to be irrespective of the mode of treatment, and none of the measures in vogue to date seems to have displayed any influence on the course of the affection or the death-rate. Measures that torture the patient are useless, and serotherapy has given no conclusive benefit in the severe cases. Pontano has been best pleased with the action of hot compresses dipped in physiologic salt solution and renewed every four hours. Although this treatment does not modify the actual course of the erysipelas or reduce the mortality, yet it is the simplest and easiest means of protecting the region, preventing contagion and reducing the pain.

Riforma Medica, Naples

December 18, XXVII, No. 51, pp. 1501-1528

145 *Effect on Blood Platelets of Injection of Pyrodin. (La plastrinosi sperimentale nella emolisi da pirodina.) A. Foti.

146 *Tests for Occult Blood. (Le ftaleine del fenolo e della resorcina come reattivi del sangue.) F. Ravenna.

147 Two Cases of Facial Paralysis. (La paralisi del facciale.) E. Grande.

145. **Effect on Blood Platelets of Injection of Pyrodin.**—Foti found that the blood-platelets increased in large numbers after intravenous injection of a 1 per cent. solution of pyrodin in rabbits. The injection had an evident destructive action on the blood, the red corpuscles being rapidly destroyed while the number of platelets increased. He found that the increased number of platelets corresponded exactly to the number of reds destroyed, and he accepts this as proof that the platelets are formed from destroyed or otherwise modified reds.

146. **Tests for Occult Blood.**—Ravenna experimented with resorcin phthalein and phenolphthalein, the Meyer reaction, his experience confirming the delicacy and reliability of the latter test, phenolphthalin in an alkaline solution revealing the presence of hemoglobin in minute quantities and even in putrefied material. The Meyer technic is more sensitive when distilled water is used for the test, as the slightest impurity in the water hampers the reaction. In urine, the addition of acetic alcohol is necessary to facilitate the test; with this, even the slightest tendency to hemoglobinuria or hematuria is readily detected. In a recent clinical case all the symptoms of a gastric ulcer subsided under the usual course of treatment but the phenolphthalin test for occult blood in the stools still gave positive findings. The young man left the hospital apparently entirely cured, refusing to heed the warnings based on the test. It was not long, however, before he was brought back with perforation peritonitis, and necropsy disclosed the perforation in a gastric ulcer. Other instructive cases are cited, among them that of an elderly man with severe anemia and symptoms suggesting gastric cancer, but the phenolphthalin test was negative and under vigorous tonic and hygienic measures the patient's condition was restored to approximately normal. Positive findings were obtained in a few cases in patients with heart disease and failing compensation, local congestion permitting the passage of a little blood into the gastro-intestinal tract. Another source of error is the swallowing of sputum containing a little blood. Ravenna is careful to exclude error from hemorrhoids and keeps his patients on a strict milk diet for three days before the test, and precedes the test with a cleasing enema, and boils and then cools the stool to be used for the test. Parallel findings with other tests confirmed anew, he says, the superiority of the phenolphthalin test. [It was recently described in THE JOURNAL, Nov. 25, 1911, p. 1783.]

Norsk Magazin for Lægevidenskaben, Christiania

January, LXXIII, No. 1, pp. 1-144

148 Experimental Research on Articles of Food Which Tend to Prevent Development of Scorbutus. (Experimentelle undersøkelse over existensen av egne "antiskorbutiske" stoffer.) V. Fürst.

149 Three Years' Experiences in Treatment of Trypanosomiasis in Belgian Congo. (Om trypanose.) J. Cammermeyer.

Books Received

Books received are acknowledged in this column and such acknowledgment must be regarded as a sufficient return for the courtesy of the sender. Selections will be made for review in the interests of our readers and as space permits.

A HANDBOOK OF THE DISEASES OF THE EYE AND THEIR TREATMENT. By Sir Henry R. Swanzy, A.M., M.D., D.Sc., Surgeon to the Royal Victoria Eye and Ear Hospital, Dublin, and Louis Werner, M.B., F.R.C.S.I., Sen. Med. Univ. Dub. Ophthalmic Surgeon to the Mater Hospital. Tenth Edition. Cloth. Price, $4. Pp. 634, with illustrations. Philadelphia: P. Blakiston's Son & Co., 1912.

SOME FACTORS INFLUENCING HEALTH IN TROPICAL AND SUBTROPICAL COUNTRIES. By T. Gerald Garry, M.D., M.A.O., M.Ch.R.U.I. Cloth. Price, 2 shillings, 6 pence. Pp. 96. London: John Bale, Sons & Danielsson, Ltd., 83 Tichfield St., 1911.

HANDBUCH DER BIOCHEMIE DES MENSCHEN UND DER TIERE. Herausgegeben von Prof. Dr. Phil. et Med. Carl Oppenheimer. 29 (Schluss) Lieferung. Volume 4, part 1. Paper. Price, 5 marks. Pp. 855. Jena: Gustav Fischer, 1911.

DIE HETEROPLASTISCHE UND HOMÖOPLASTISCHE TRANSPLANTATION. Von Dr. Georg Schöne, Privatdozent der Chirurgie, Marburg. Paper. Price, 8 marks. Pp. 161, with 29 illustrations. Berlin: Julius Springer, 1912.

JEWISH DIETARY LAWS FROM A SCIENTIFIC STANDPOINT. A Study by N. E. Aronstam, M.D. Paper. Price, 25 cents. Pp. 24. New York: Bloch Publishing Company, 40 East 14th St. 1912.

TWENTY-EIGHTH ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF THE STATE OF RHODE ISLAND FOR 1905. Cloth. Pp. 300. Providence, 1911.

FIFTEENTH ANNUAL REPORT OF THE LOOMIS SANATORIUM FOR THE TREATMENT OF TUBERCULOSIS. Liberty, Sullivan County, New York. 1911.

THE CONQUEST OF NERVES. By J. W. Courtney, M.D. Cloth. Price, $1.25. Pp. 209. New York: Macmillan Company, 1911.